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ABSTRACT

A model adapting the ideas of the British Infant School to the culture of American education is presented. The model presents open education as potentially most useful to Indian and Migrant Education and incorporates already existing concepts, such as training in linguistics and thought. This document is divided into three parts: (1) development of an undergraduate training program for teachers and paraprofessionals, (2) review of research relating to the effect of choice on the child, and (3) a model incorporating the ideas associated with the British Infant School. This third part proposes that open education relates to divergent problem solving, tempered by the concern for compassion for and understanding of human frailties. The model is developed at the philosophical, conceptual, and goal levels. (Author/DJ)

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THE WASHINGTON CENTER FOR EARLY CHILDHOOD EDUCATION

CENTRAL WASHINGTON STATE COLLEGE: Ellensburg, Washington

DIRECTOR: DR. JERALD NELSON

OPEN MINDED, THOUGHT-FILLED EDUCATION :

- A guide for Head Start-type programs
- An approach to learning in kindergarten, primary, & elementary grades
- How to develop a paraprofessional/professional training program
- Services for field-based programs
- (Appropriate as a college text in early childhood education)

CONTENTS

PART A: DEVELOPMENT OF THE WASHINGTON CENTER FOR ECE PROGRAM

Developing an undergraduate training program for paraprofessionals and professionals who work with young children, ages 3-8 (with some ideas relevant to infant education).

PART B: THE PROBLEM OF CHILDREN'S CHOICE

Should children be allowed choices within the classroom? Are there any practical limitations? What does CHOICE to do and for the child?

PART C: THE WASHINGTON CENTER FOR ECE LEARNING MODEL: THE CHILD'S RESPONSIBILITY FOR HIS/HER OWN EDUCATION

One approach to those ideas often associated with the British Infant School or Open Education; An American adaptation of a child-centered learning model appropriate for migrant, bilingual, and other culturally-different children; Divergent problem solving based upon compassion.

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CENTRAL WASHINGTON STATE COLLEGE
Washington Center for Early Childhood Education

ELLENSBURG, WASHINGTON
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OPEN MINDED, THOUGHT-FILLED EDUCATION

Abstract

During this past year the program of the Washington Center for ECE has become oriented towards field programs. Because of the current interest in open education, a model was devised which seemed to adapt the ideas of the British Infant School to the culture of American education. The model was limited in that it set forth open education as potentially most useful to Indian and Migrant Education, and it incorporated already-existing concepts, such as training in linguistics and thought, rather than creating new concepts.

The book is divided into three parts:

1. The development of an undergraduate training program for teachers and paraprofessionals.
2. A brief review of research relating to the question: What does CHOICE do to and for the child? If a child chooses those tasks he/she wishes to work at, does he/she become better prepared to handle future academic tasks?
3. A model incorporating those ideas often associated with the British Infant School or Open Education.

The third section of the book is most thoroughly developed. It sets forth an American adaptation of a child-centered learning model appropriate for migrant, bilingual, Indian, and other culturally-different children. It proposes that open education actually relates to divergent problem solving, tempered by the concern for compassion towards and understanding of human frailties. The model is developed at the philosophical, conceptual and goal levels, but no behavioral objectives are set (although children's behavior is discussed).

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The WASHINGTON CENTER FOR EARLY CHILDHOOD EDUCATION is a Central Washington State College program, directly responsible to:
The Dean of Education (John A. Green, Dean)

The ECE program is interdepartmentally supported and staffed by:
The Education Department (Conrad H. Potter, Chairman)
The Home Economics Department (Luther G. Baker, Chairman)
The Psychology Department (Joseph E. Rich, Chairman)

The three department chairmen and the Dean of Education serve on the ECE Advisory Committee to the Washington Center for ECE.

When a program is based upon those needs evident in field-based programs, a great deal of cooperation is involved. The following agencies and programs have given generously of their cooperation and trust:

Superintendent of Public Instruction (Ms. Roberta LaCoste, Assistant Director of Elementary Education)
Head Start Supplemental Training (Ms. Mary O. Haller, Seattle University)
Northwest Rural Opportunities (Ms. Esperanza Alzona, 110 N. Second, Pasco)
Center for Migrant and Indian Education (Dr. Lloyd Gabriel, Director, Toppenish)
Consortium of Washington Education Centers (Dr. James Parsley, Director, CWSC)

For additional copies of the publication OPEN MINDED, THOUGHT-FILLED EDUCATION, send a $2.00 check or money order (per copy), addressed and payable to:

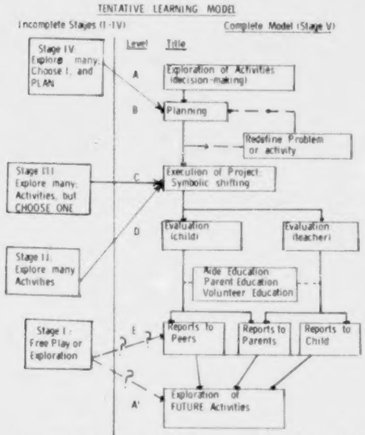
WASHINGTON CENTER FOR ECE
Hebeler Building
Central Washington State College
Ellensburg, Washington 98926

PREFACE

This booklet is an attempt to answer the question: What is the Washington Center for Early Childhood Education?

It is hoped that the reader will gain some insight into the Center's program for majors, the classrooms for young children, the cooperative services offered to field programs, and the rather extensive learning model proposed for young children.

The WCECE took form as a total program during the summer of 1971. Formed as a concern of the faculty and administration of Central Washington State College, it has continued to develop as a service adjunct to field programs in Central Washington.


TENTATIVE LEARNING MODEL
Incomplete Stages (I-IV)
Complete Model (Stage V)
Level
Title
Stage IV Explore many, Choose I, and PLAN
A
Exploration of Activities (decision-making)
B
Planning
Redefine Problem or activity
Stage III Explore many Activities, but CHOOSE ONE
C
Execution of Project Symbolic shifting
D
Evaluation (child)
Evaluation (teacher)
Stage II Explore many Activities
Aide Education
Parent Education
Volunteer Education
Stage I: Free Play or Exploration
E
?
?
?
Reports to Peers
Reports to Parents
Reports to Child
A'
Exploration of FUTURE Activities

Read carefully through the WCECE Learning Model. While it appears complex, two points should be kept in mind:

1. The model encompasses one approach to divergent problem-solving; stressing skill in exploration, planning, execution, evaluation, and reporting.
2. The model is divided into five stages so that plans can be made for sequencing children gradually into a mature approach to problem-solving.

Through the model the educator can look at children. It is less obvious that one can also use the model as a way of looking at all curricular areas, such as arithmetic, reading, social studies, art, etc. One could also use it to guide and evaluate teaching. Children, curriculum, and teaching--the model is useful wherever there are problems.

Appreciation is expressed to the entire WCECE staff, the ECE Advisory Committee (Drs. Green, Potter, Rich, and Baker), those who work in field programs in Central Washington, to the children who enrich the program, and to the ECE majors who supported the WCECE in its time of transition.

A special thank you must be voiced to the parents, the families who have so loyally supported the children's classroom programs on the CWSC campus.

Dr. Jerald Nelson, Director
Washington Center for ECE
Central Washington State College
Ellensburg, Washington

March, 1972

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*See page 39 for a larger drawing of the WCECE Model

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CHAPTER I

EARLY CHILDHOOD EDUCATION: A BELIEF IN ACTION

INTRODUCTION

In the pages which follow, the reader will be exposed to two levels of program, comment, and description relevant to early childhood education; (1) A general description of early childhood education as it now exists in the United States, including references to practical programs and theoretical ideas. (2) A description of one program, the Washington Center for Early Childhood Education, which attempts to set forth and establish the need for the development of an internally consistent training program.

The text will be open-ended, for the state of knowledge concerning "What is the best way to train children" is, at best, hesitant and exploratory. The real hope is that this text will challenge the reader, unsettle old notions and ideas, raise and leave unanswered new concerns. What ultimately matters is that the professional educator feels the commitment to rise to challenges, examine old notions and ideas, and fully expect that these processes will lead to new concerns as well as tentative answers.

The staff of the Washington Center for Early Childhood Education welcomes the opportunity to share the past year's work and ideas with the reader. There is no feeling of defensiveness (or this text would never have been written), only a sense of urgency in needing to share. The only defense lies in trying to discover and protect that which preserves the child's right to learn and develop to the best of his/her potential.

This text has been divided into three parts. Part A (Chapters II-IV) discusses the development of the WCECE program, as contrasted with other programs. Part B (Chapter V) is a deliberate aside; an attempt to directly approach the issue of CHOICE in childhood education. Part C (Chapters VI-X) relates to the development of a child-centered model, one which is unique to the Washington Center for ECE.

OVERVIEW OF THE TEXT

Part A:

Chapter II is designed so as to present the field of early childhood education as it has developed in just the past decade or so. Emphasis is given to the evaluation of "What seems to work" in terms of nationally-recognized programs.

Chapter III presents the rationale for the building of the Washington Center for ECE program. The second portion of the chapter explains briefly that which was developed in about seven months. The supportive rôle in relation to field programs is presented.

Chapter IV details two aspects of the WCECE program. The first part specifies the current WCECE program as it is currently available on campus. The second part relates to field programs and their effect upon the point of view adopted by the campus-centered program.

Part B:

Chapter V is, frankly, an interlude; an exploration of the tricky problem: "Should children be allowed to exercise CHOICE in their own program?" The argument is advanced that, in allowing choice, the teacher is promoting the development of some portion of the child's intellectual structure.

Part C:

Chapter VI continues the development of the WCECE program by stating the philosophical and conceptual goals of a learning model. Specifically, this looks at the nature of the child by asking: "What is it that the child will be doing 25 years from now that can be educationally promoted in the classroom today and tomorrow?" The answer to this question seems to be "the solution of problems by the proposal of divergent ideas."

Having arrived at the "divergent problem-solver" conclusion as proposed in Chapter VI, Chapter VII goes on to outline a model relevant to that skill. The first portion goes into great detail on the complete model, and later sections present ways in which children can be "staged" into that skill.

Chapter VIII extends ideas about the model to include a brief look at teaching and curriculum. The skills needed (as a child) to learn in a manner indicated in the model are stressed.

(Appendix A has been attached as an extension of the ideas about the model, Chapter VIII. This Appendix presents comparisons across portions of the model of teaching styles and curriculum usage in a traditional versus an open classroom. It was felt that these ideas did not belong in the main body of the text because the model does not specify which teaching style or curriculum is "best". The model requires only that teachers look at children.)

If children are to learn in a manner prescribed by the model, an evaluative device should accompany that model. A description of model-related evaluation is contained in Chapter IX.

Chapter X is comprised of a series of very practical articles, all of which were written by WCECE staff members. These articles relate to the every-day routine of conducting classes for young children.

PART A

DEVELOPMENT OF THE WASHINGTON CENTER FOR ECE PROGRAM

CHAPTER II: DESCRIBING EARLY CHILDHOOD EDUCATION--NOW

A brief review of those early childhood programs which evolved in response to the social concerns of the 1960's.

CHAPTER III: BUILDING THE WASHINGTON CENTER FOR ECE PROGRAM

Developing a professional training program in response to those concerns voiced in field-based programs

CHAPTER IV: THE WCECE MAJOR AND TRAINING PROGRAM

The ECE undergraduate major; its requirements and available courses.

Two examples of WCECE service to field-based programs

CHAPTER II

DESCRIBING EARLY CHILDHOOD EDUCATION--NOW

A NON-HISTORICAL PERSPECTIVE

There is a nowness to early childhood education which seems to transcend the necessity for looking at historical points of view. That nowness has been brought about because of national concerns --concerns which relate to wasted potential.

The charge to ECE professionals in the field seems to be: "Do things. Try things. Worry less about philosophical and idealistic concerns." In a sense, this is a charge to begin again, but from a more practical point of view.

Why? The most pervasive argument is that which came from anti-poverty fighters. It is the argument that poverty is grounded in ignorance or lack of truly effective education, and the time to mount an educational offensive is that time when the child is developing most rapidly.

Therefore, the history of practical ECE programs and concerns on a national scale goes back only as far as the 1960's. Look at the practicality of what has happened during that decade:

..... Head Start

..... Titles I, III, VI, and VII of the Elementary and Secondary Education Act

..... National Laboratory for Early Childhood Education

..... Regional Education Laboratories

..... President Nixon's proposal for day care and educational services for 450,000 children of working welfare mothers (first proposed in 1969)

..... Representative John Brademas' Comprehensive Preschool Education and Child Day Care Act to authorize preschool programs for all children

..... Educational Television (Sesame Street, The Electric Company)

..... Senator Long's Federal Child Care Corporation proposal

..... Industry-operated day care

..... Migrant and Indian day care programs

..... Educational Professions Development Act (about $5 million yearly for early childhood training)

..... Teacher Corps, with seven out of 60 programs devoted to the kindergarten level

..... Project Follow Through

Early childhood education now has its foot in the door--two doors, in fact. It will pervade the future scene both as a part of reputable and well-developed day care programs AND as a downward extension of the present public school program.

DAY CARE CENTERS PROMOTE THE GROWTH OF EDUCATION
FOR PRESCHOOL-AGE CHILDREN

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The case for tying together poverty and educational inadequacies is best made by examining the report Equality of Educational Opportunity (by James Coleman et.al., Superintendent of Documents Catalog No. FS 5.238:38001). Even though this report actually deals more with ethnic origin and education, it is fairly well accepted that minority ethnic groups form a substantial portion of those existing in conditions of poverty. If, as the Coleman Report suggests, children who start academically below the median tend to fall even further behind rather than catching up, then it is most reasonable to base the academic attack at a very low age level so as to provide greater equality in terms of readiness to learn.

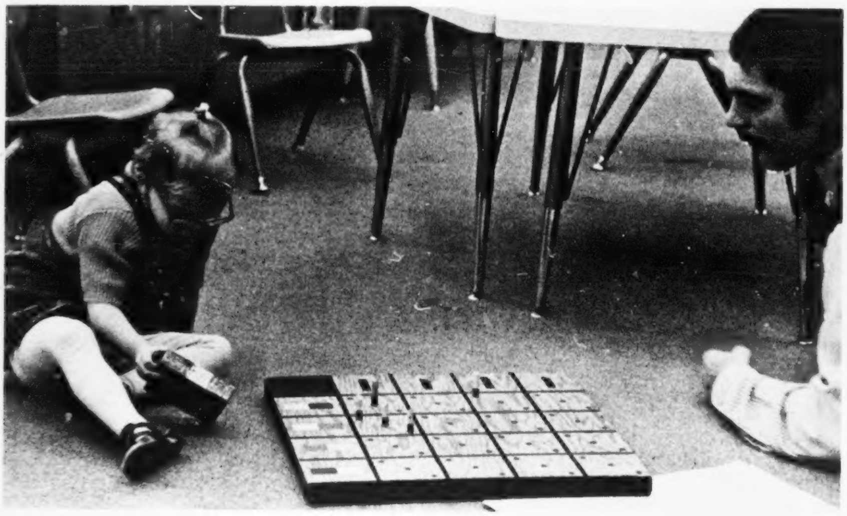
EDUCATION OFFERS MANY KINDS OF TRAINING

So far, only the practical and necessary case for early childhood education has been presented. There are other factors to be considered, too. For example, some parents simply want their children to have a preschool experience as an enrichment to their lives. They may look at this enrichment as being social in nature, or as making the child more independent. Other parents look to these programs to provide prereading and reading training, while others accept it as an adjunct to being a working mother. There seem to be as many reasons as there are kinds of programs available.

The old conflicts of philosophies and assumptions concerning early childhool education are still with us; they are a part of conversations whenever those who deal professionally with young children gather in groups of two or more. Nevertheless, there is no longer an argument of whether we "should or shouldn't" --early childhood education is now a part of American life.

WELL, THEN, WHAT SEEMS TO WORK?

First of all, the idea that educators can examine theoretically pure programs as borrowed from other countries is nonsense. There are no pure British Infant Schools in America, nor Montessori Schools (although there is a very close approximation), nor Piaget Schools. The last is even an absurdity, for Piaget has not seen his approach as educational in nature--it is grounded in the observation of certain aspects of child development, according to his point of view. The other two approaches have undergone Americanization by the children themselves. That is, even if they existed in tightly specified methods and materials, the approaches were changed to take into account the cultural nature of the children involved (and this is as it should be). This is



"WHICH PEG SHALL I WORK WITH NEXT?"

true because both approaches look to children to pursue their own interests, exploring stimulating materials and activities (Infant School) or choosing from among materials which are self-educative (Montessori).

A tentative idea of the practical effectiveness of American ECE programs can be obtained by examining a report prepared by the American Institutes for Research in the Behavioral Sciences for the U. S. Office of Education. AIR evaluated and examined the reports of more than 1,000 compensatory education projects submitted over a 5-year period (1963-68). They specified 11 preschool projects which seemed to produce significant achievement among educationally deprived children. These were:

1. Infant Education Project, Washington, D. C.
   Tutoring (by women) of 15-month-old black male babies.
2. Academic Preschool, Champaign, Illinois
   Force-feeding of concepts in language, arithmetic, and reading (since published under the title of DISTAR). Bereiter and Engelmann
3. Ameliorative Preschool Program, Champaign, Illinois
   Giving children practice in talking, manipulating, and using language games. Karnes
4. Early Education Project, New York City
   Placing emphasis upon the cognitive (thinking) areas of language, perception, concept-formation, and self-image. Deutsch

5. Preschool Program, Fresno, California
Verbal communication and vocabulary development with children who speak English as a second language.
Forrester
6. Diagnostically Based Curriculum, Bloomington, Indiana
Diagnosis and specific attack upon learning deficits in language, concepts, and fine motor development.
Hodges, Spicker, and McCandless
7. Project Early Push, Buffalo, New York
Emphasis upon materials, such as furniture, housekeeping items, musical instruments, locomotor toys, etc. Downey
8. Language Stimulation Program, Auburn, Alabama
Using language stimulation lessons developed by Peabody College. Carter
9. Preschool Program, Oakland, California
Using teacher aides, parent volunteers, and school-community workers to augment conceptual and cognitive development. Hunter
10. Perry Preschool Project, Ypsilanti, Michigan
Constant teacher-talking; verbal bombardment to direct the child's attention to his environment. Weikart
11. Learning to Learn Program, Jacksonville, Florida
Use of games having to do with clothing, food, animals, furniture, and transportation. Sprigle

This is only a brief overview of those programs which AIR identified as being effective. More complete information can be found in PRESCHOOL BREAKTHROUGH (National School Public Relations Association, 1201 16th St., N. W., Washington, D. C.).

A MORE CAREFUL LOOK AT WHAT SEEMS TO WORK

If the reader wishes to become more knowledgable about programs having a stronger research base, contact the National Laboratory for Early Childhood Education, National Coordination Center, University of Illinois, Urbana, Illinois. There are also six Regional Laboratories interested in sound educational ideas in early education, scattered from California to New York.

Head Start has also begun to take a greater interest in research efforts. At the present time they are conducting a long-range research effort, attempting to discover the most effective ways to teach low-income children. This effort, Planned Variation, has selected a small number of pilot programs, and will follow the children involved through the third grade. In conjunction with this reading, look also under the title Project Follow Through (the March, 1969 issue of YOUNG CHILDREN can serve as a study guide).

TRANSLATING NATIONAL FINDINGS

The results of widespread compensatory ECE programs have pointed to many potential educational remedies. These remedies can be more confusing than clarifying, however. Therefore, the next chapter will present one rationale for program-building, and will then examine the product when this program was applied at Central Washington State College in producing the Washington Center for Early Childhood Education.

CHAPTER III

BUILDING THE WASHINGTON CENTER FOR ECE PROGRAM

PROGRAM-BUILDING: RATIONALE

As a guide to program development in the Washington Center for ECE, a learning model was devised (presented in complete form in Chapter VII.) This model is no more than an organizational guide, giving direction to the staff's efforts and hooking together concepts or ideas about children. While there are unique aspects to the model, it does not pretend to represent a unique approach to early education and development. It does not specify the way in which a teacher must teach, nor does it espouse any particular curriculum. It forces one to look at children, not at teaching methods or curricular materials.

Before going into detail concerning the Washington Center for ECE Learning Model, however, consideration must be given to: (1) the way in which the WCECE total program is being developed, and (2) the role of field-based programs in the campus ECE major (and total program).

There are several ways to envision the building of a program designed to train professionals and paraprofessionals who will direct and work in programs for young children. One of these is to apply a philosophical/theoretical position concerning the nature of childhood development and learning. Then, aspects of the training program will be developed in such a way as to be consistent with that philosophical/theoretical position. These programs then tend to be labeled in terms of that position, such as Piagetian.

A second approach is to work from and under the direction of a campus committee, one which is heavily representative of the educational profession. This approach tends to have practical problems in that some of those educators may not be aware of special problems existing in the surrounding classroom programs--they may tend to work more from generalities. Also, these educators may bring a diverse set of theoretical ideas to the problem, which then presents the problem of reconciling these positions or developing an eclectic program (neither of which is easy, and neither of which is related to field-based problems).

A third approach was used in developing the WCECE program, one which seemed to be more closely related to real needs in the field, and one which (hopefully) would tend to produce more immediate results. (The latter point was also very critical in view of the rapid movement towards ECE program development in the State of Washington; see the February 1972 issue of YOUR PUBLIC SCHOOLS, pages 12-13.) The approach has no title but it works from the assumption that professional/paraprofessional training programs need to be more than responsive to field-based concerns; they should be built using these concerns as a basal point.

THE WASHINGTON CENTER FOR ECE PROGRAM: A RATIONALE

The approach to building the WCECE program is roughly shown in Diagram 3a.

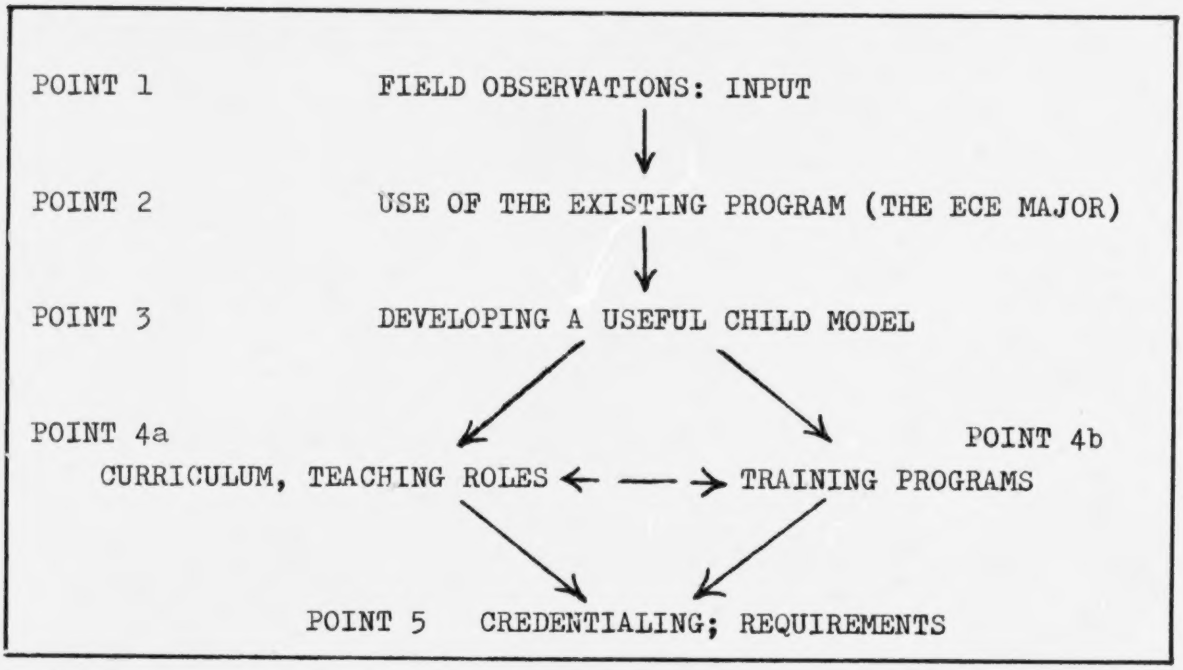
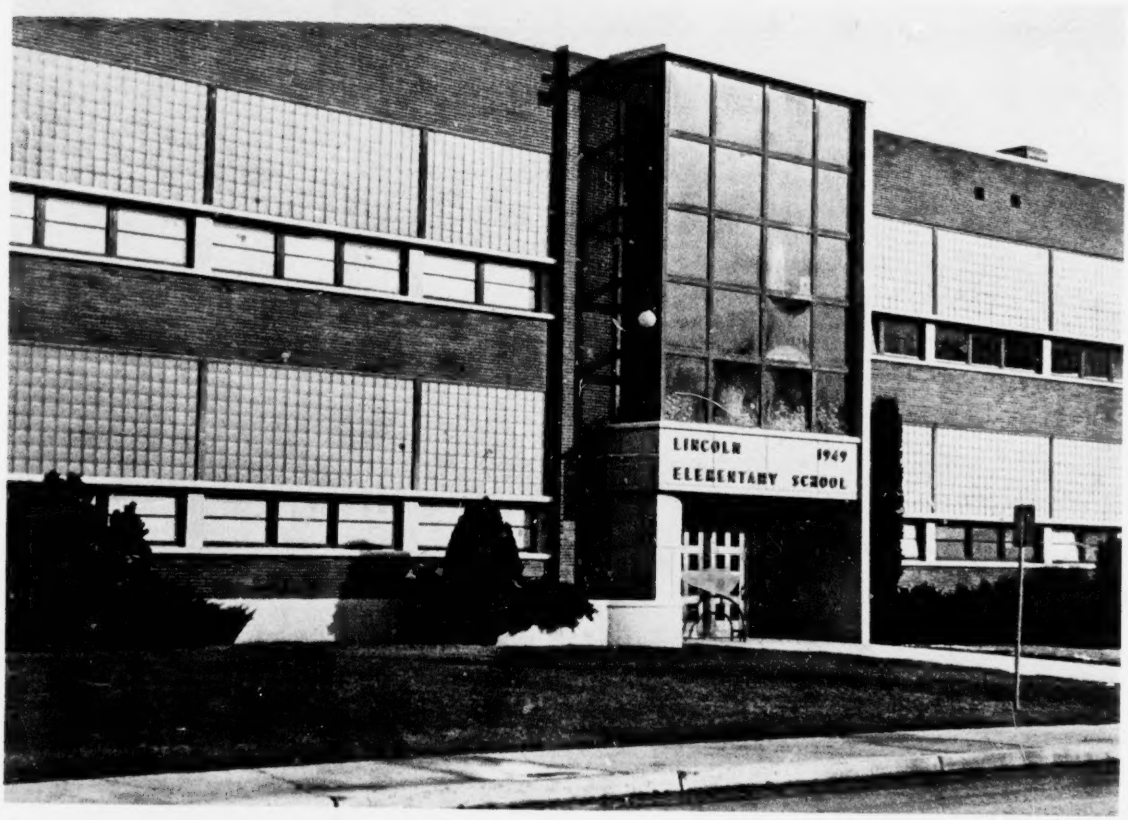

POINT 1
FIELD OBSERVATIONS: INPUT
POINT 2
USE OF THE EXISTING PROGRAM (THE ECE MAJOR)
POINT 3
DEVELOPING A USEFUL CHILD MODEL
POINT 4a
CURRICULUM, TEACHING ROLES
POINT 4b
TRAINING PROGRAMS
POINT 5
CREDENTIALING; REQUIREMENTS

Diagram 3a

Point 1: From June of this year to the present time, countless visits and conversations have fed into the WCECE program. Interested people, many of whom direct preschool classroom programs, voiced their concerns about the nature of training programs. According to them, training must include knowledge about budgets, in-service training and career development, and effective parental support and involvement AS WELL AS knowledge about child development and curriculum. Much of this information originated in child care programs, and a listing of these people and their programs is contained in the latter part of this chapter (with apologies to any who were omitted.) Of particular importance were the opportunities opened to the WCECE staff by Mary O. Haller, Head Start Supplemental Training and Esperanza Alzona, Northwest Rural Opportunities.

Also, in the fall, a series of seven meetings were set up around the state by Roberta LaCoste, Assistant Director of Elementary Education, all of which were designed to explore feelings and concerns about kindergarten and preschool programs. Most of the participants were those who were already working in ECE programs, giving invaluable information from the point of view of public and private education.



SCHOOLS, IN DESIGNING KINDERGARTENS, HAVE BEGUN TO EXPLORE FEELINGS ABOUT PRESCHOOL PROGRAMS

Point 2: As each bit of new information was received, it was measured against that which already existed in the current ECE major at CWSC. Much of what already existed was relevant to the expressed concerns, such as the high degree of child-contact being given to the majors through both practicum and student teaching. The relevant existing parts of the major were then put together with other field-voiced concerns so as to

AN ECE MAJOR WORKS WITH A CHILD

structure a new, proposed major (this major is undergraduate in nature and is fully outlined in Chapter IV.)

Point 3: Responding once again to field concerns, a unique model for childhood learning was designed. It was the feeling of many that teachers and aides who dealt with young children felt little sense of continuity with those who taught older children. After all, they were not teaching history or geography per se in the kindergartens. What stream of continuity is there which ties education together, no matter whether one is looking at an infant or an eight-year-old?

LOOK AT THE CHILD, NOT AT CURRICULUM OR TEACHING STYLE

The model only proposed that continuity should be based upon an intensive look at childhood learning; it did not set aside concerns about teaching styles and curriculum (See Chapters VI, VII, and VIII; and Appendix A.)

Point 4a and 4b: From this point on there were program aspects which had to be dealt with in an interactive manner. If childhood learning is chosen as a method of directing intensive attention towards the child's educational efforts, one still has to ask: What is curriculum and how is it to be used? What is the role of the teacher, aides and parents? What needs to be placed in workshop training programs? What do the ECE majors need the most exposure to (since their training cannot cover every facet of program direction and teaching?) These questions constitute major portions of this year's WCECE program development.

Point 5: Finally, one arrives at the point of credentialing. This is of extreme importance since it is the way by which the state sets criterion for minimal competencies, usually at the undergraduate and graduate level. The issue of aide certification is also involved, but this is often handled through arrangement with community colleges since this is the level at which training is usually conducted. As an adjunct, the state is also involved in setting minimal requirements for buildings in which day care is conducted. The WCECE is continuing to work with community colleges and state agencies in these areas.

REALITY

There is no need to pretend that these aspects of program development were rigidly and sequentially followed, point by point. Program development has to be viewed in a cyclic manner, so that the entire program goes through development and redevelopment.

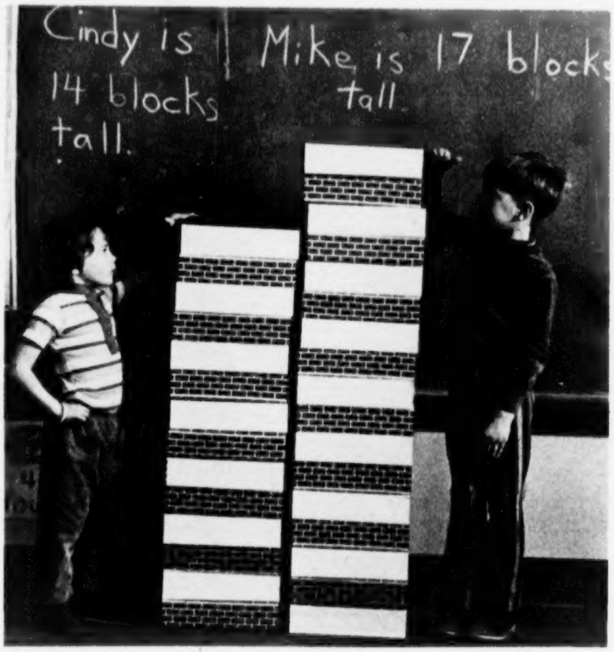
The points in Diagram 3a should be viewed as guides only. The WCECE is involved in or concerned with developing a program for ECE majors and offering services to field program. This diagram only specifies the way in which these inter-related concerns are coordinated.

THE WASHINGTON CENTER FOR EARLY CHILDHOOD EDUCATION TODAY

As a result of a feasibility study conducted by the faculty and administration of Central Washington State College, Ellensburg, Washington, The Washington Center for Early Childhood Education was established at the beginning of the 1971-72 academic year. It was the feeling of those professionals that the college had need of a program which would involve itself in the training of professionals and paraprofessionals so as to meet early childhood program and staffing needs already present in the central Washington area.

Briefly, the Center is involved in an interrelated set of activities:

1. Offering an on-campus major in Early Childhood Education, principally at the bachelor's degree level.
2. Conducting classes for young children (mostly ages 3-8) for the purpose of experimental work and providing practicum experiences to the ECE majors.
3. Developing more thoroughly the learning- or child-centered model. (This does not imply that the model allows children to guide for themselves all that they do; it only implies that the model directs attention towards the child FIRST, then towards potential analysis of curriculum or methods.)
4. Providing workshops and consultant services to ECE and day care programs already operating in the field.



YOUNG CHILDREN IN AN EXPERIMENTAL CLASSROOM

5. Cooperating with the office of the State Superintendent for Public Instruction in promoting standards of credentialing for those who work in pre-school settings.

These concerns as they relate to other programs are outlined in brief form in Diagram 3b.

WCECE: AREAS OF CONCERN AND EFFORT

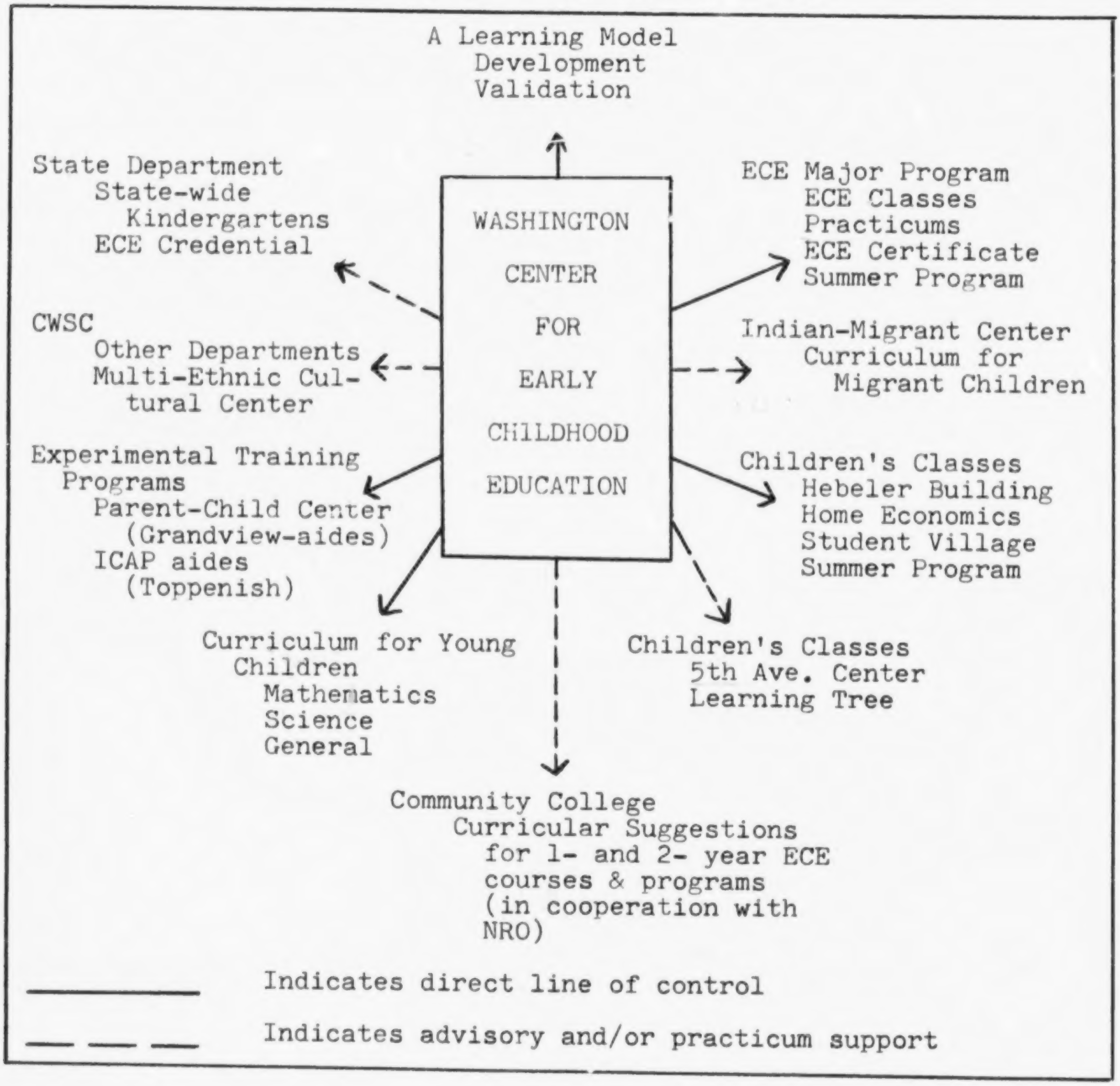


Diagram 3b

Information about each of these efforts may be secured in greater detail by contacting:

1. Ms. Sherri Avena
   Center for Indian and
   Migrant Education, CWSC
   Toppenish, Washington

   (Curriculum for migrant classrooms)

2. Ms. Mary O. Haller
   Head Start Supplemental Training
   Seattle University
   Seattle, Washington

   or

   Ms. Lucia Newborn
   Parent-Child Center (NRO)
   Grandview,
   Washington

   (Training program for aides)

3. Ms. Mary O. Haller
   Head Start Supplemental Training
   Seattle University
   Seattle, Washington

   or

   Ms. Florence Haggerty
   Indian Community Action
   Program (ICAP)
   Toppenish, Washington

   (Training program for aides)

4. Ms. Gayle Held
   Learning Tree Academies
   Ellensburg, Washington

   or

   Ms. Thelma McKenzie
   Fifth Avenue Community
   Center
   Ellensburg, Washington

   (Advanced practicum for on-campus students)

5. Ms. Jo Mitchell
   Hebeler Building, Room 107
   Central Washington State College
   Ellensburg, Washington

   (Practicum for ECE majors)

6. Ms. Roberta LaCoste
   Assistant Director of
   Elementary Education
   Old Capitol Building
   Olympia, Washington

   (State-wide kindergartens; ECE credentials)

7. Ms. Lillian Canzler
   Hebeler Media Center
   Central Washington State College
   Ellensburg, Washington

   (Curriculum for young children--math, science, general)
   (See also Chapter X article on media centers)

8. Ms. Esperanza Alzona, NRO
110 North 2nd
Pasco, Washington

or

Ms. Betty Corn
Farm Labor Camp
NRO Day Care Center
Walla Walla, Washington

Ms. Sue Wimett, NRO
110 North 2nd
Pasco, Washington

or

Ms. Margaret Oman
NRO Day Care, Box 879
Moses Lake, Washington

(NRO-Community college training program for aides)

9. Dr. Jerald Nelson
Washington Center for ECE
Hebeler Building
Central Washington State College
Ellensburg, Washington

(A child-centered learning model; see also Chapters VI-X)
(ECE 4-year program; see also Chapter IV)
(ECE summer program)
(ECE certification)

CHAPTER IV

THE WCECE MAJOR AND TRAINING PROGRAM

INTRODUCTION

There are two thrusts evident in the development of the WCECE major. First, cooperative efforts with field-based programs have had an impact upon the 4-year on-campus ECE major. Secondly, needs demonstrated by field programs have prompted the extension of the ECE major into geographical areas served by those programs. This chapter will therefore examine the on-campus major, and then show two ways in which the program serves field programs in rather unique ways.

THE ECE PROGRAM ON-CAMPUS

The Early Childhood Education (ECE) Major is designed to prepare teachers and directors for programs enrolling children of ages infancy through eight years. Occupational opportunities include the primary level of the public school, day care centers, Head Start, private nurseries, migrant programs, Indian educational programs, etc. Many of these will have a component of federal and/or state funding.

The ECE Major is but one part of a total program now being offered by the Washington Center for ECE (WCECE), currently centered in the Hebeler Building on the Central Washington State College campus. Other facets of the program include classrooms for young children on campus, day care and Head Start assistance, cooperation with the Center for the Study of Migrant and Indian Education, the development of a learning model and curricula, and providing leadership in Washington ECE programs.

The WCECE is an interdepartmental program, securing support and faculty from the Departments of education, home economics, and psychology. These departmental chairmen, together with the Dean of Education, comprise the ECE Advisory Committee.

Field-based research done as a part of the WCECE program emphasizes learning styles of the several minority groups in the central Washington area, and aide-training programs.

The professional education program for ECE majors is also field-centered, based upon the belief that their preparation will be most sound when majors are involved in helping the WCECE staff meet the responsibilities just listed. Therefore, all majors are responsible to the Director, WCECE.

The ECE major must be accompanied by the Professional Education Sequence and the Professionalized Subjects Minor, sets of courses designed to prepare the major for a credential related to teaching in classrooms in the elementary schools of Washington. This credential is issued by the Superintendent of Public Instruction. In addition, Central Washington State College will award a certificate in ECE to all who complete the major and are recommended by the Director, WCECE.

Early Childhood Education Major (A 45-Credit Major)

Students who elect the ECE major must complete the Professional Education Sequence and the Elementary School Professionalized Subjects Minor. Also, Ed. 341 (September Experience) and Ed. 442 (Student Teaching) will be taken at the pre-primary or primary level, and ECE 309.3 will be substituted for Psychology 309 (Human Growth and Development.)

Normally, the students majoring in ECE will be asked to take 242, 309.1 and 309.3 as the initial portion of their major studies.

A total of no more than 12 credits of practicum (442.1, 442.2) may be used to satisfy major requirements. ECE 242, 442.1 and 442.2 will be graded S or U.

Normally, the Senior Seminar (ECE 494) will be taken following practicum and student Teaching. Exceptions will be made for students who student teach during the last quarter of their senior year.

REQUIRED	CREDITS
ECE 242, Aide Experiences	4
ECE 309.1, Comparative Child Development	3
ECE 309.3, Applicable Theories in Child Development	3
ECE 333, Curriculum for ECE	3
ECE 334, Curriculum Application	3
ECE 442.1, Practicum in ECE	6 - 10
ECE 494, ECE Senior Seminar	3
Required Credits:	25 - 29

Approved electives from either ECE or HEc 345 and HEc 492 to make a total of 45 credits:

Elective Credits: 16 - 20

TOTAL CREDITS IN THE MAJOR: 45

Comments

It is important to note that the major emphasizes practical experiences with children, both through aide experience early in the major and (later) actual practicum teaching experience.

The early aide experience gives the major a chance to get some practical, concrete orientation to young children. It also gives them a chance to evaluate themselves in reference to actual experiences.

The practicum classes are designed to provide in-class teaching experiences for Early Childhood majors. Each student is encouraged to apply what he has learned about young children, and to assume as much responsibility for the class as rapidly as possible.

One quarter (ECE 442.1) is spent in three different classrooms with young children. The students spend one month with pre-school children where they assume an increased amount of responsibility for planning curriculum experiences and directing classroom activities. The final week is usually spent "head-teaching". Two other two-week experiences in classrooms with children of different ages are also provided.

The practicum experience usually includes: assisting with home visits and parent work, functioning as a classroom aide, working with the head teacher in a team-teaching relationship, being video-taped, teaching a unit(s), and observing individual children.

Course Descriptions

ECE 242. Aide Experiences. 4 credits. May be repeated twice with permission of director. A wide range of practical activities designed to give ECE majors experience in observing and working with children at the early childhood level. The equivalent of 8-10 hours of work per week in a classroom shall be required. (When lower division practicum credit of this type is transferred into CWSC, it shall be accepted as substituting for up to 12 credits of elective courses.)

ECE 298. Special Topics. 1 - 6 credits.

ECE 299. Seminar. 1 - 5 credits. May be repeated.

ECE 309.1. Comparative Child Development. Developmental characteristics of young children, with emphasis on nursery and kindergarten age levels. Stresses the comparison of these characteristics across various segments of society. (ECE 309.1 and HEc 309.1 are the same course. Students may not receive credit for both.)

ECE 309.3. Applicable Theories in Child Development. 3 credits. A study of the theoretical viewpoints concerning areas of child development; the validation of these theories in terms of observing predicting observable behaviors. This course will substitute for Psych. 309 in the professional education sequence for ECE majors. (ECE 309.3 and HEc 309.3 are the same course. Students may not receive credit for both.)

ECE 309.4. Infant Education. 3 credits. A study of the needs and characteristics of the infant and toddler. Considers the parent-child role in terms of promoting developmental/educational growth in the child; curriculum for use in the home. (Not open to students who have credit in ECE 309.0 or 309.2.)

ECE 333. Curriculum for ECE. 3 credits. Basic concepts in classroom curriculum and evaluation. Curricular concepts will center in environmental learning and developmental characteristics of the child. Evaluation concepts will center in child and teacher self-evaluation as a basic aspect of curriculum. (Prerequisites: ECE 242 and ECE 309.1 or ECE 309.3.)

ECE 334. Curriculum Application. 3 credits. The application of basic concepts in classroom curriculum and evaluation developed in ECE 333. (Prerequisite: ECE 333.)

ECE 398. Special Topics. 1 - 6 credits.

ECE 412. Bilingual Education. 3 credits. Introduction to bilingual-bicultural education for children who are dominant in a language other than English. Social and community questions, theoretical background and teaching strategies will be explored.

ECE 414. Comparative Childhood Learning. 3 credits. The study of the application of learning/developmental theory with emphasis upon Piaget's developmental reasoning theory. A comparison of theory with classroom setting, and the resultant development of relevant curriculum. A basic comparison of learning versus development as modes of change in the child's life. (Prerequisites: Psych. 310, ECE 309.1 and 309.3.)

ECE 418. Culture and Curriculum. 3 credits. Culture-based curriculum, and its evaluation in terms of cultural transmission. (Anthropology 130 is highly recommended as a prerequisite.)

ECE 437. Curriculum Exploration. 3 credits. May be repeated once for credit. In-depth study of that curriculum which is consistent with child development theory, environment and culture. May work with the staff in WCECE curriculum writing, or may devote the class to innovative ideas. (Prerequisite: ECE 418 or permission of the director.)

ECE 438. The Nursery School. 4 credits. Procedures, desirable equipment, and materials. Participation in the nursery school. Two lectures and four laboratory hours per week. (This is the same course as HEc 438. Students may not receive credit for both. ECE majors may not receive credit. Prerequisite: ECE 309.1 or HEc 309.1.)

ECE 440. Workshop. 1 - 6 credits.

ECE 442.1 Practicum in ECE. 6 - 10 credits. Practical application of knowledge and abilities related to young children. Laboratory experience required at several age levels. (Prerequisites: ECE 334, ECE 309.1 and ECE 309.3, and permission of the director.)

ECE 442.2. Advanced Practicum. 3 - 10 credits. A course designed to meet special needs as determined by the student, his/her advisor and the director, WCECE. (Prerequisites: ECE 442.1 or permission of the director.)

ECE 443. Lab Experience/Teaching ECE. 3 credits. Assist ECE professors in teaching those courses which involve outside observation or participation. (Prerequisite: Permission of the director.)

ECE 445. Parent Involvement. 3 credits. Parent-child and parent-school interactions as educational and developmental aids. Emphasis upon the school's use of the home and community for educational purposes. (Not open for credit for students who have taken ECE 420.)

ECE 446. Model Programs. 3 credits. A comparative study of ECE models. Students will design a model program. (Prerequisites: ECE 334; ECE 418 or ECE 445 highly recommended.)

ECE 465. Directing ECE Programs. 3 credits. Budgeting, governmental requirements, staffing, nutritional and health care, parental involvement, community and agency liason, and the integration of developmental/educational curriculum. (Permission of the director required.)

ECE 485. Paraprofessional Training/Supervision. 3 credits. Methods and materials used by ECE directors in providing inservice training and supervision to their staffs. Includes the factor of career development and advancement as a part of aide training and supervision.

ECE 494. ECE Senior Seminar. 3 credits. Integration of the ECE major's experiences in terms of looking at philosophies, problems and current issues in the field of ECE. (Prerequisites: ECE 442.1 and Ed. 442 or permission of the director.)

ECE 496. Individual Study. 1 - 6 credits. May be repeated. Prerequisite: permission of instructor.

ECE 498. Special Topics. 1 - 6 credits.

ECE 499. Seminar. 1 - 5 credits. May be repeated.

WCECE SERVICE TO FIELD PROGRAMS

There are two ways in which the WCECE staff has demonstrated the ability to work in field-training projects. In one of these, the training was conducted over a full-year period in the children's classrooms of day care centers. In the other, WCECE helped set up a Community College-Northwest Rural Opportunities project in which training is conducted under the joint supervision of the colleges and NRO. In this project, WCECE staff also offered initial training workshops.

Aide Training in the Children's Classrooms

Along with national recognition of the significance of early childhood education programs came increased funding to establish day care and pre-school projects for the children of migratory farm laborers, Indians, and other low-income families in the State of Washington.

In keeping with the principle of parent/child involvement in all phases of education, these early childhood education programs utilize parents as either teachers or aides. In order to set up programs which would help children develop to their fullest potential in all ways, the parent, aides, and teachers involved felt that additional training in early childhood education was a necessary component.

Recognizing these needs, the Head Start Supplementary Training Office, under the direction of Mary O. Haller at Seattle University, requested that the Washington Center for Early Childhood Education provide a training program for teachers and aides in four day care centers and a Head Start Center. Because of this request, the WCECE responded to the challenge and expanded its training component to include a field-centered component in the lower Yakima Valley.

The training program was predicated upon some identified needs of the teachers and aides working in these Early Childhood Education programs. The aides and teachers felt a need for training in theories of child development, actual practices with childhood, and practical examples of activities designed to enhance the development of children in the program. In order to alleviate these needs, the Washington Center for Early Childhood Education developed a 15 credit, 9 months training program, in October of 1971, under the direction of Ms. Melva McCullough (WCECE staff).

The project is unique not only because of the formation of a cooperative liaison between college, school and community educational agencies, but also in that the entire 15 credits are offered at the location of the four day care centers in Granger, Grandview, Toppenish and Wapato.

The training program offers a flexible range of coursework including: Introduction to Early Childhood Education (1 credit), Child Development I (4 credits), and Aide Experiences I and II (10 credits). The provision of training in the centers has been a vital aspect of the program for many reasons. One important reason is that the centers serve different communities with different needs.

The centers located in Granger and Grandview are Parent-Child Centers, and function under Northwest Rural Opportunities. These centers are primarily serving the migrant farm laborer's family. The centers provide medical examinations, well-balanced meals, and a program to help children develop to their fullest potential from the ages of one month to six years. The parents are involved in these centers as teachers and aides.

The centers at Toppenish and Wapato are under the direction of Head Start and the Yakima Tribal Council. These centers serve the Indian community and their children from the ages of 2½ to 6 years. Although parental involvement is a goal of these centers, the parents are not actively working in the centers as aides or teachers, but work more indirectly in other types of projects to benefit the center and their children.

The Head Start center in Wapato is different in that it is a pre-school center and serves low-income families' children from ages 4 to 5 years in a half-day program. An important part of their program is the strong parental involvement and medical/dental care provision, as well as the activities provided for children in the pre-school day.

The provision of the training at the center has another important role in that the instructor, the aides, and the teachers can work together to solve specific problems and help develop programs which can meet their individual needs. The centers are visited once a week, and the morning is spent in working with the children, the aides and the teachers. It is a time when the instructor can help with specific activities, bringing in different approaches which may be helpful. It also serves as an opportunity for the instructor to become aware of teacher/aide needs, and to provide resources and support to help them meet these needs.

The afternoon is also spent in the center, but this time is used for the classes in child development, introduction to early childhood education, and a seminar designed to help evaluate the program. A major goal of the class is to have the aides and teachers evaluate themselves and their program for young children. In order that they may assist in this evaluation, the video-tape machine is being utilized frequently. Viewing video-tapes has been an excellent method for them to become more aware of their inter-actions with the children, and of the reactions and cues of the children. (These video-tapes may be checked out from Central Washington State College audio-visual library.)

Being involved with the problems of the lower Yakima Valley has made the WCECE more aware of its role in the training of future teachers of young children. The ECE major's course of study has been changed in order to provide more relevant and realistic training.

Community-College/NRO Cooperation

A second opportunity for WCECE field service was provided through the award of a training grant to Northwest Rural Opportunities (NRO, Ms. Esperanza Alzona, 110 North 2nd, Pasco, Washington.) The proposed idea was to involve community colleges in a joint effort to provide 1-year training programs for aides and teachers in Washington's NRO day care centers.

The community colleges in areas served by the NRO day care centers were given funds to hire teacher trainers, who, in turn, offered supervision and course work in the centers. The year-long program includes:

15 quarter credits in supervised practicum (teacher trainer)
15 quarter credits in basic ECE courses (teacher trainer)
15 quarter credits in workshops (offered by state-wide experts in ECE programs and curriculum)

The WCECE served in a consultant and supportive capacity in initiating these programs. Thereafter, WCECE staff members offered two of the first workshops to be included in the program (Ms. Sylvia Boyle, WCECE Staff.)

PART B:

AN INTERLUDE - A TRICKY QUESTION

CHAPTER V: ALLOWING CHILDREN TO CHOOSE: YES OR NO?

CHAPTER V

ALLOWING CHILDREN TO CHOOSE: YES OR NO?

INTRODUCTION

At this point it would be very natural to progress into the presentation of the philosophical goals and assumptions underlying the WCECE's approach to childhood education. There is, however, one concern which is so pervasive and argumentative throughout ECE programs that it is best to draw direct attention to this controversial issue:

> Should children be allowed to choose what they want to work at when they are in an ECE setting (ages infancy-eight)? Does it prepare them to do a better academic job throughout the elementary school level?

There is a developmental-based concern regarding the amount of time a three-year old should spend in organized, structured group activity. Isn't childhood a golden age, and shouldn't a child be left to do free exploration during that age?

Other concerns demand consideration, too. More effective ways must be found to teach children of low-income families, and children who have cultural backgrounds which are strong but different (even linguistically) from that which characterizes the while, middle-class child. Does children's choice offer help or hinderance for these concerns?

It is not enough that the rationale for children's choice be based upon the happiness and enjoyment shown by the children. After all, it is possible to be very happy and blissfully ignorant at the same time.

Happiness is not the argument advanced by cognitive psychologists, either. Piaget, for example, advises the observer to watch the child perform a task in terms of the child's INTEREST in the task. The task may be very perplexing, the child's brow is creased with a frown, and yet the task is appropriate *as long as the child wants to continue working at it*.

CHILDREN'S CHOICE: A RATIONALE

There is no good rationale for allowing *totally free choice*. After all, the factor of safety will enter in ("you don't jump out the window even if you choose to"), and there is no easy way to assess concentration. In the latter case, every teacher has had a David-hop-skip-jump-keep moving-push-take child, and in that case,

"THAT'S THE ONE I WANT"

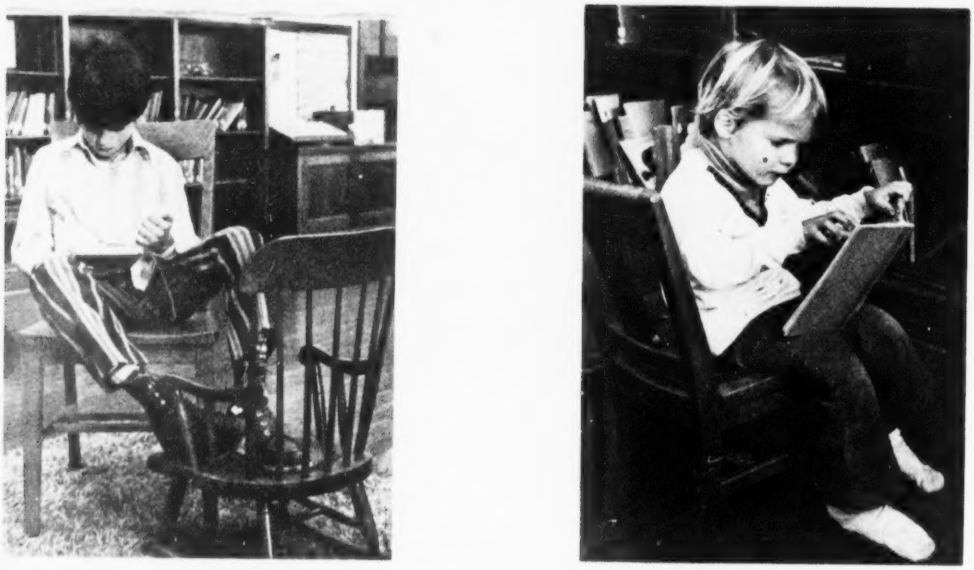
the movement, choosing, and re-choosing of David is a potential factor in preventing learning, both for David and for other children.

There are reasons to allow children to play some role in choosing activities, however. First of all, young children tend to learn from familiarity; they tend to stay with an object, game, or song until it becomes like an old friend. In that instance, they relax

"I'VE HEARD THAT STORY BEFORE"

--the stage has been set for them to learn because they have chosen a friendly object, a friendly game, or a friendly song. The threat of newness is removed.

This does not mean that they will not be attracted by newness; if they feel at home in the classroom, they can tolerate and use some degree of newness. However, try this experiment with a group of three-year-olds. Introduce two or three songs to them at the same time, and repeat these songs daily. Chances are, after a short period of time, one of those songs will become an old friend, and the teacher will be asked for it again and again--to the point where it bores the teacher (but NOT the children.) There is another way to test this out, too, for the attraction of familiarity is apparent in children's interest in and repetition of TV commercials.



"THESE OLD STORIES ARE MY FRIENDS"

There is an even more important reason to allow choice, however. A number of psychologists have pointed to choice as being important in childhood intellectual development, relating it through the concept of OVERLEARNING.

Overlearning is what the adult demonstrates when he/she puts on the brake while driving without consciously thinking about it; overlearning is present when an adult can add two simple numbers so easily that no conscious process or effort is involved. But overlearning is difficult if not impossible to measure. It is that which can be done with 100% accuracy AND with little or no conscious thought--and that latter aspect is not observable.

Overlearning enters into intellectual development in various ways, depending upon whose explanation is used. Piaget feels that a child learns/develops as his own actions make him interact with his environment. For example, the child pushes the suspended ball to make it swing back and forth. This interaction does not really contribute to the child's intellectual growth, though, until the action of pushing and the expectation that the ball will swing ARE BOTH AUTOMATIC.

Remondino, in looking at the intellectual factor which Thurstone named "number", concluded that this factor was actually an ability to work with any simple OVERLEARNED SYMBOLIC SYSTEM, not just an ability to execute simple arithmetic problems. Remondino's stress on both overlearning and working with symbolic systems is very similar to Cattell's concept of crystallized intelligence. Cattell proposed that there is a facet of intelligence which develops through familiarity and overlearning. (The remarks on Piaget, Remondino, and Cattell are taken from a dissertation: CONSTRUCT VALIDATION OF THE SERIATION TEST, Nelson, 1968.)

To the teacher, this means that research has pointed to overlearning as at least a part of or condition for intellectual development (and these research arguments were based upon studies of children, not adults or animals.) Remember, however, that no test will indicate overlearning. If a child is given 10 arithmetic problems and scores 100%, that shows learning, not overlearning. Even if the answers are given rapidly, that is no guarantee of overlearning.

The child, through exercise of choice, can be given the opportunity to work at a task to the point of overlearning. The teacher will have no other way of knowing when the child wishes to engage in that overlearning.

NOTE OF CAUTION CONCERNING CHOICE

There is no intent that this argument be used in support of a totally free-choice academic setting. The teacher still has to exercise judgment and planning, for there is always the David-hop-skip-etc. who must be given greater control. The teacher has to also exercise judgment, for Johnny's free choice may put him in direct confrontation repeatedly with Kathy.

The argument is only that teachers look with greater understanding at children who play the same silly game, or sing the same silly song. It is a part of intellectual development.

It is recognized that there is choice operating in traditional classrooms as well as in the more open ones. The degree to which choice is allowed is a complex factor, often dependent upon teaching style, materials available, space, directions from administrators, and community pressures. But whatever choices are available to the children should be fought for, even re-evaluated in light of their potential to add to the child's development.

Note, too, that an aspect more substantial than learning is being discussed. Things learned can be forgotten. Overlearning (and choice) operate in the field of intellectual development--that which is not forgotten, but which becomes a part of the child's permanent adaptive process. Therefore, guided opportunities for making choices and experiencing the results of following through choices are given to young children in the learning areas at the WCECE. This rationale and its effect upon the WCECE should be kept at the reader's conscious level as he/she progresses into the philosophical and conceptual basis for the program.

PART C:

THE WASHINGTON CENTER FOR ECE LEARNING MODEL

CHAPTER VI: PHILOSOPHICAL GOALS AND ASSUMPTIONS OF THE MODEL; CONCEPTUAL GOALS OF THE MODEL

CHAPTER VII: THE WCECE LEARNING MODEL; ONE APPROACH TO THE AMERICANIZATION OF THE BRITISH INFANT SCHOOL:

A divergent, problem-solving model which encourages the interaction of compassion and learning, and which is built upon the processes of:

A. Exploration and potential decision-making.
B. Planning
C. Execution; the recording of one or more potential solutions.
D. Evaluation; the analysis of one or more potential solutions by both students and their teachers.
E. Reporting; the presentation of evaluated findings by students to their peers and parents; presentation of evaluations by teachers to students and their parents.

CHAPTER VIII: THE WCECE MODEL; THE ROLE OF TEACHING AND CURRICULUM

CHAPTER IX: AN EVALUATION FORMAT; EVALUATION AS MEASURING THOSE PROCESSES OR ABILITIES SPECIFIED IN THE WCECE MODEL

CHAPTER X: OBSERVATIONS BY THE WCECE STAFF

A set of 14 articles written by members of the WCECE staff, reflecting many practical experiences during the 1971-72 school year. These articles cover diverse experiences, such as application of the model, learning centers, video taping, music and science for young children, the role of the library as a media center, and parent programs.

CHAPTER VI

PHILOSOPHICAL GOALS AND ASSUMPTIONS, THE WCECE MODEL (PART I)

Philosophically, the goal of the Washington Center for Early Childhood Education is to enhance each student's ability to deal thoughtfully and rationally with a world in which change is an ordinary dimension.

Change is internal to the student for developmentally there are progressions on several fronts--social, emotional, perceptual, motoric, linguistic, reasoning, and structural.

Change is also external to the student for, although there are many processes which are amenable to rules, the student's task is more often the using of generalized rules in problem-solving, not the learning of rules per se.

The mature adult is therefore one who has assimilated his/her own developmental changes, and can then use these assimilated understandings so as to effectively solve problems existing in the learner's environment.

ASSUMPTIONS

Modern research in human development has shown that one of the basic drives of life is mastering the environment. It is important to remember that the environment is one of constant change. This drive is present from birth until death. This poses a basic problem of life, and from it comes the many problem solving situations which individuals must face. Life and what we call play (both social and physical manipulation), is actually a learning situation. This has lead to the development of the WCECE learning model, which will aid in developing an environment-orientated curriculum and an observational and evaluational process. In this process will be identified those sequential steps by which the child can progress from the earliest stage of problem solving (free play).

LIFE
Most of life's problems
Mastering a changing environment
Facing problem-solving situations
Facing one problem

In terms of what has been already stated, then, Diagram 6a shows life as being primarily composed of problems. In turn, most of these problems will involve a changing environment. In this changing environment, a person will potentially be able to identify many obvious problem solving situations, and out of this milieu, should then be able to center upon or face just one problem.

However there is more to early childhood than the production of problem solvers. The ideal is the production of compassionate problem solvers who are multi-culturally-aware.

Human beings enter into problems. They are a part of problems and a part of the solutions. Therefore, problem solvers must know about people--problem solvers must have that personal knowledge which leads to compassion. It is not enough to understand people to the extent that one knows about them. An effective problem solver must be able to sense the feelings, the emotional approach of another, for it is this which will determine whether the other will become a part of a solution or a continuation of the problem.

But understanding others does not come easily, not to the extent of compassion. It can begin, however, from an understanding of peoples--an understanding of cultures. Therefore, it is not enough that Blacks be allowed to study their cultures, or that Indians be allowed to study theirs. All cultures must be studied by all people, and this includes Whites and various White cultures. Studying one's own culture may lead to pride, but not necessarily to compassionate understanding.

One final word must be said about this culturally-aware, compassionate problem-solver. By stating that humans are involved in problems and their solutions, one implies that any problem has more than one solution. If not, the human element would be irrelevant. Therefore, training for problem-solving must include an anticipation that many solutions are available. The best solution is one which achieves a balance of human elements and which is best understood by all concerned. In training young children, this means the presentation of problems for which there are a range of potential answers. This can be done in many situations. For example, one child may observe that water piles up above the rim of a glass, while another may be able to predict rather closely the number of drops needed to make the water spill over the edge. Both observations are accurate so long as they are useful to those children in terms of solving problems in the future. There is no one right answer.

The culturally-aware, compassionate problem-solver; is this our primary educational goal? It is essential that we begin to look ahead of now; that we not train our children for the world today. Today's children will live and work at a time when many of their present teachers will be having a declining influence in the world of vocational and social effort. We cannot afford to train them to always look to a teacher to see if they got the right answers to questions that come from yesterday's world. They must be trained now to become effective problem-solvers in a humanistic sense if they are to work out solutions to tomorrow's problems.

What methods do we use to teach the very young problem solving? Children basically learn problem solving techniques in their play/learning. Play to children is very serious business. Play = learning is their guiding equation.

This is a complex equation, however. It does not assume that all play will be free play. It does emphasize two aspects of learning:

1. Much learning is either social or is conducted in a social context.
2. Play-related learnings tend to emphasize physical manipulation of objects, and children seem to need situations which are more concrete in order to better understand what "problem situation" means.

"NOW I SEE; I UNDERSTAND"

Based upon these assumptions, then, the reader may expect that the WCECE Model will:

1. speak specifically to the nature of childhood learning.
2. de-emphasize the factors of curriculum and teaching style.
3. make relatively little or no distinction between play and environmentally oriented curriculum.
4. speak to the role of observation and evaluation as it affects learning, but centering upon what the child observes and how the child evaluates.
5. be usable in migrant classrooms in which children are in attendance for only short periods of time.

DEFINITIONS

1. Curriculum may be defined as the intentional enhancement of the environment such that problems are presented, but in such a way that students can bring rules and processes to bear. Curriculum is, therefore, inter-relatedness.

2. The student's task is to acquire a mode of dealing with problems, realizing that the problems and the learner are caught up in inter-related processes.

A Note of Extreme Importance about A Task or Problem: In the Washington Center for Early Childhood Education, a student has arrived at a correct solution to a problem IF that solution is meaningful to that student. There are many different degrees of "right-ness", making it difficult to specify behavioral objectives. The conceptual goal, however, is to help students develop their problem-solving skills.

3. The classroom is any location where the student, problems, and potential solutions are brought together.

4. The teacher's task is to diagnose both problems and students in such a way that the resultant curriculum takes into account the developmental maturities of the student.

CONCEPTUAL GOAL: THE LEARNING PROCESS IN THE WCECE (PART II)

Conceptually, the goal of the Washington Center for Early Childhood Education is to facilitate the student's problem-solving ability by providing a process which produces solutions potentially meaningful to him. The various facets or skills of this process may be viewed as a stepwise progression through each of the following activities:

Level A: A starting point for problem solving is the exploration of activities; exploring in such a way that potential problems are defined without harm to either the student or peers. The student selects a problem for attack.

Level B: After a problem has been defined, the mode of attack upon that problem should be planned. At this step the problem may be redefined, but should not be discarded.

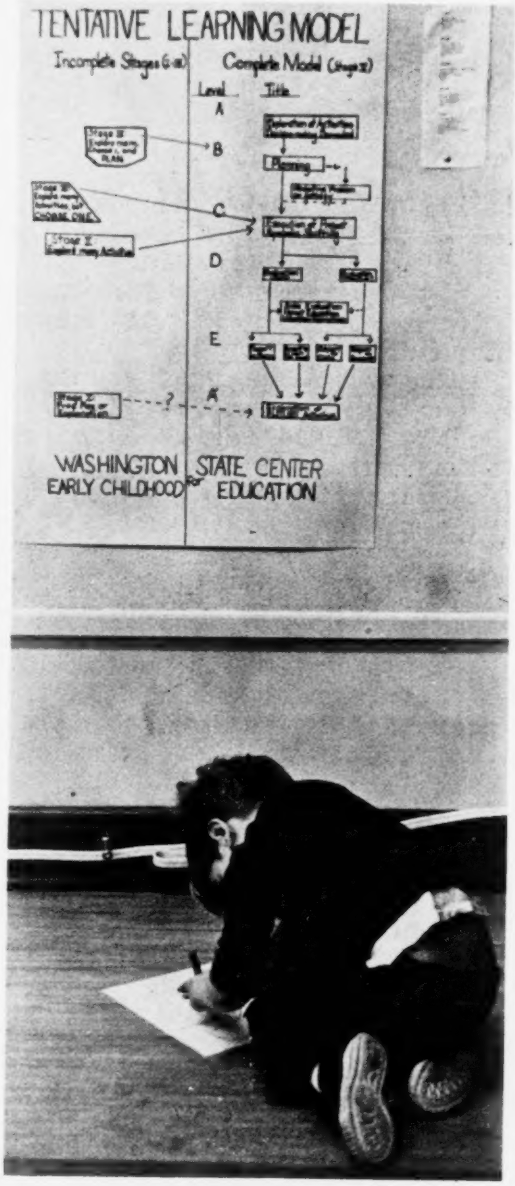
Level C: During the execution of the project or activity, data should be held in some manner. The advantages of this are twofold, for (1) the student acquires practice in shifting symbolically from one process-system to another, and (2) data and observation are held in a more accurate form for use in future evaluations.

Level D: The main mode of evaluation is the student's own impression as to the extent to which he/she was able to suggest a solution to a problem. The teacher is asked to evaluate the extent to which the student seemed to grasp the rules available in the processes under consideration.

Level E: The student should report the results of his/her investigation to peers and parents, for the feedback from this communication reveals to the student the extent to which his/her solution is generalizable to other people. More direct feedback is to be passed from the teacher to both the student and his/her parents.

Level A′: The answers to problems should be viewed as being most meaningful when they are reflected in the student's exploration of future activities and problems.

The WCECE model should therefore be viewed as child-centered, concentrating one's attention upon learning style and process as demonstrated and evaluated by the child.



"I EXPLORE, I PLAN, I DO, AND I LEARN"

CHAPTER VII

THE WASHINGTON CENTER FOR ECE--LEARNING MODEL

INTRODUCTION

Among Early Childhood Education programs in the United States there is a current belief that optimum human development and learning are both dependent upon enhancing the physical and psychological environments which surround the young child. This belief has given rise to the implementation of a wide variety of curricular projects, with curriculum being defined in terms of the intentional enhancement of the environment. That is, the child's classroom can be conceived as being comprised of objects, animals, and people, all of which have a certain degree of inter-relatedness, one to the other. The child's task is to discover this inter-relatedness; therefore, this type of education can be thought of as being process oriented.

The educational program at the WCECE is one which also can be described as process oriented. The largest portion of the child's education is carried on by presenting that child with a choice of a series of projects or activities, each of which comes under the child's own direction. It is in this way that learning is brought together with childhood development, for the child's learning will tend to reflect the levels of development exemplified by that child in terms of various abilities, such as communication, social acknowledgement, and logical thinking.

The following is a complete representation and description of a model of learning or inquiry which applies to the child in the WCECE when that child is engaged in discovery or interest-centered learning. The model is intended to follow the child as he progresses from exploration of potential activities through the development and evaluation of those activities and into the feedback or final reporting level. The reader should be alerted to the fact that this model is incomplete at least to the extent that ranges of behavioral objectives have not been supplied for each of the levels involved. Also, revision of the model may be necessary prior to the writing of these objectives.

It would be easy to describe the WCECE model as being "British Infant School." This is true in some ways, since CHOICE plays such a large role in the Model. It is not true in that the WCECE model requires that children move towards data collection/holding and self-evaluation. These facets are implied in the British Infant Schools, but they are not stated as necessities.

COMPLETE TENTATIVE WCECE LEARNING MODEL

Diagram 7a shows the Model in such a way that a complete problem-solving ability is exemplified as Stage V, or the part to the

TENTATIVE LEARNING MODEL

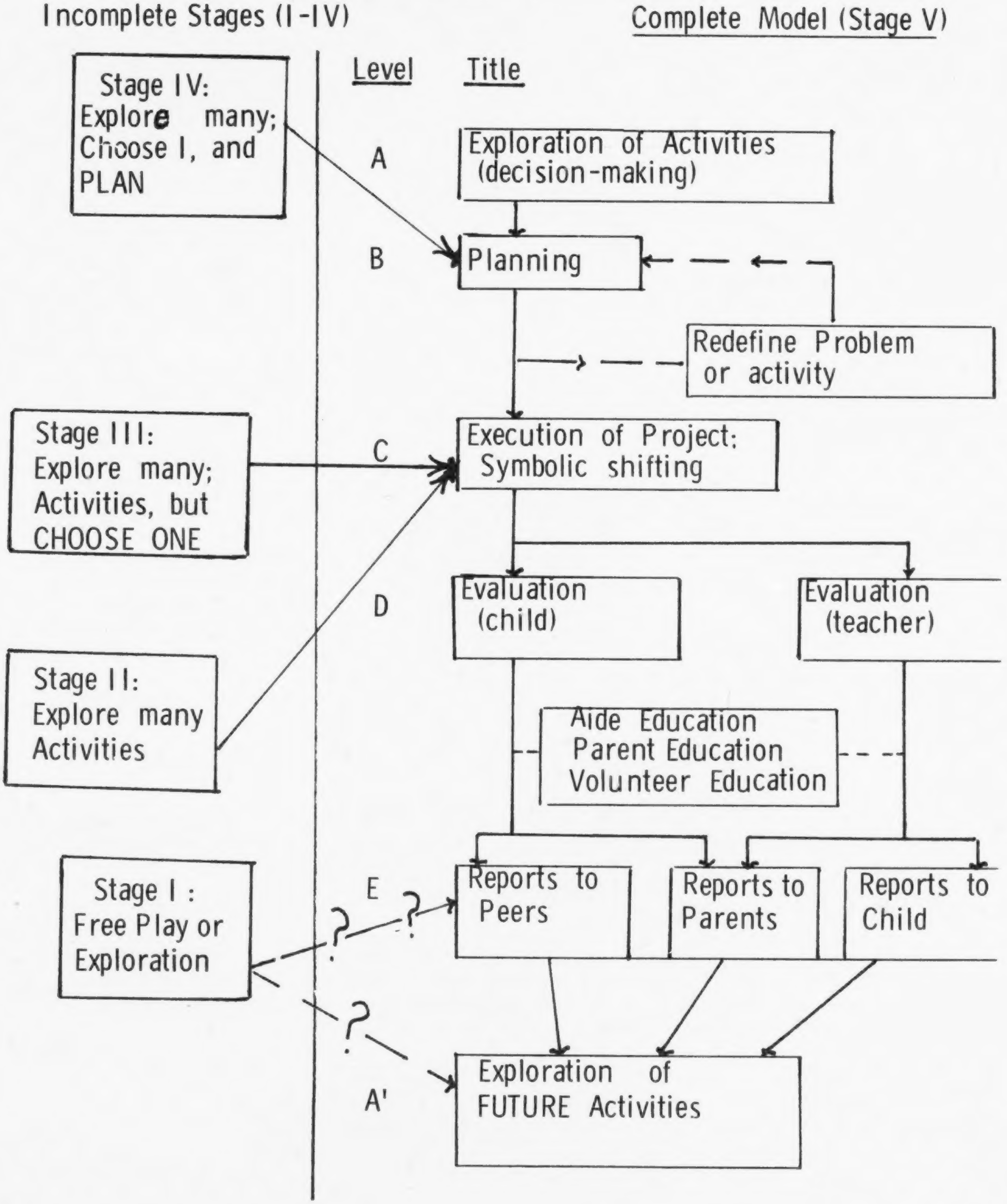

Incomplete Stages (I-IV)
Complete Model (Stage V)
Level
Title
Stage IV: Explore many; Choose I, and PLAN
A
Exploration of Activities (decision-making)
B
Planning
Redefine Problem or activity
Stage III: Explore many; Activities, but CHOOSE ONE
C
Execution of Project: Symbolic shifting
D
Evaluation (child)
Evaluation (teacher)
Stage II: Explore many Activities
Aide Education
Parent Education
Volunteer Education
Stage I : Free Play or Exploration
E
?
?
?
Reports to Peers
Reports to Parents
Reports to Child
A'
Exploration of FUTURE Activities

Diagram 7a

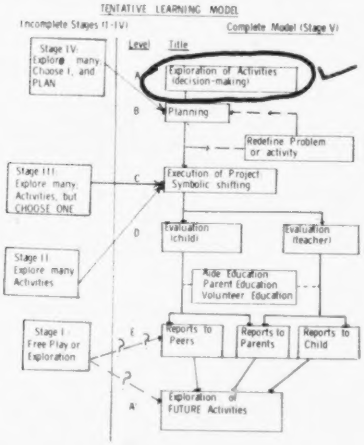
right of the solid vertical line. This is a representation of one way in which a mature person might approach and resolve a problem-situation or problem-activity.

Because children lack a complete, formalized thinking ability, they do not have the ability to look at problems as an adult does. They cannot think into the future, so planning is difficult, as is prediction. Therefore, a sequential plan for staging students into problem-solving is shown to the left of the vertical line in Diagram 7a. This plan breaks the sequencing down into four stages, with higher stages dependent upon what has been learned at lower stages.

First, a description of the complete ability (or STAGE V) will be given. Once the reader becomes familiar with the demands made of a good problem-solver, then the sequential stages (STAGES I-IV) can be explained in comparison to STAGE V.

STAGE V: ADULT-LEVEL PROBLEM SOLVING

Level A: Exploration of Activities--As the child enters a learning situation, there exists a potential to develop or participate in a variety of projects and activities. This might be designated as the student-directed and teacher-reflected state, in that the child is allowed to explore possible alternatives freely, using the teacher as a resource in terms of clarifying various questions. The nature of this stage changes radically according to the age of the child, for the younger child will tend to make choices based upon familiarity and prior experience while the older child has a certain degree of logical thinking which can be used.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Incomplete Stages (I-IV)
Complete Model (Stage V)
Level
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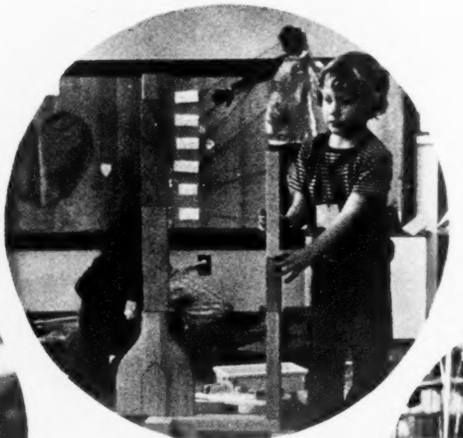
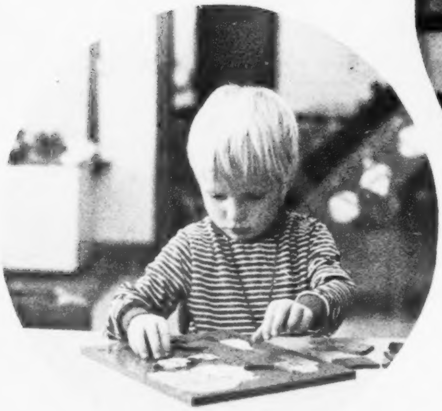
Stage IV: Explore many, Choose I, and PLAN
A
Exploration of Activities (decision-making)
B
Planning
Redefine Problem or activity
Stage III: Explore many Activities, but CHOOSE ONE
C
Execution of Project Symbolic shifting
D
Evaluation (child)
Evaluation (teacher)
Stage II: Explore many Activities
Aide Education
Parent Education
Volunteer Education
Stage I: Free Play or Exploration
E
?
?
Reports to Peers
Reports to Parents
Reports to Child
?
A'
Exploration of FUTURE Activities

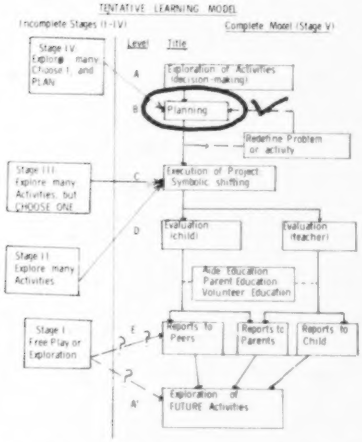
Other than free exploration of possible choices, the primary purpose of level A is for the child to develop a DECISION. It is at this stage that the child chooses what he wants to do and makes a commitment to follow-through on that choice.

Many programs allow this choice to be a verbal one, although some will tend to use a purchase agreement arrangement in which the child exchanges chips or other symbolic material for the activity or project to be selected.





THE EXPLORER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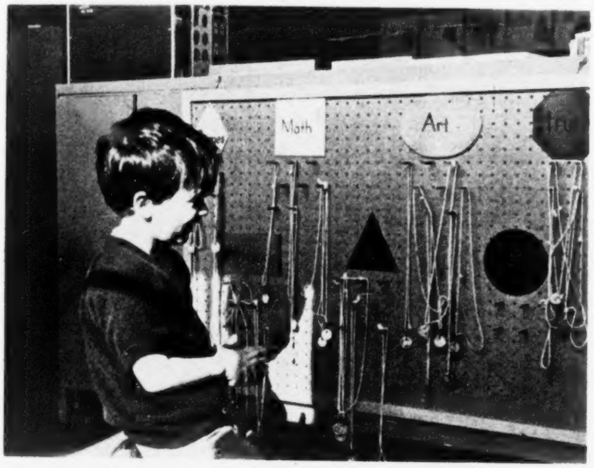
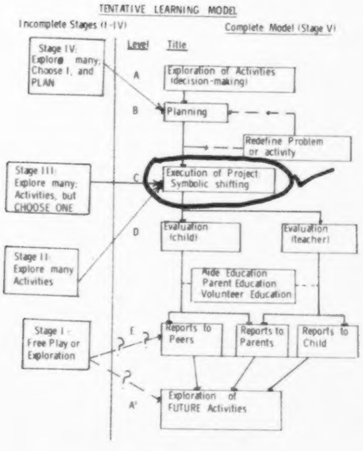
Stage I - Free Play or Exploration
E
Reports to Peers
Reports to Parents
Reports to Child
?
?
?
A'
Exploration of FUTURE Activities

Level B: Planning--After the child has made a firm commitment to a project or activity, planning should ensue. In some cases this will be as simple as putting away materials already being worked with before going on to a new area. In more complicated cases, this will involve working with the teacher, aide, and other involved children in order to draw up a plan of attack and materials needed. Much verbalization will often result from planning although it is recommended that plans of attack and materials be listed out whenever possible.

Level B also contains a feedback mechanism for redesign of the problem or activity. The child should be allowed a mechanism whereby the mode of attack or definition of the problem is amenable to alteration. This does not mean that the child will be able to cast aside the problem or activity and choose another, except in unusual circumstances.



"WHAT'S NEXT FOR ME?"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E
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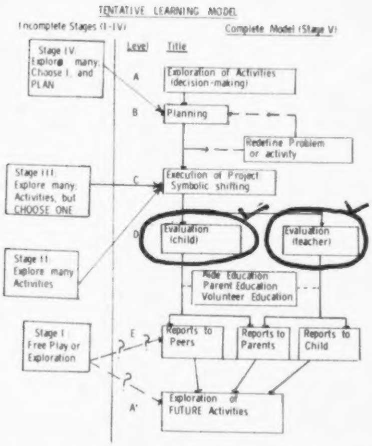
Reports to Parents
Reports to Child
?
?
?
A'
Exploration of FUTURE Activities

Level C: Execution of Project--As the child carries through in working on the project, it is adviseable that some visable representation be made of that project by the child. If the child's project is to build a large house out of blocks, then the representation might be drawing a picture of that house. In working with older children the representation is more likely to take the form of quantification and graphing. In both cases the child might keep a record of the time involved in that project, together with a listing of those materials needed but which were not included in the previous planning.

"HERE, I'M DONE. HELP ME WITH THE STORY"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Complete Model (Stage V)
Level
Title
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Stage III: Explore many: Activities, but CHOOSE ONE
Stage II: Explore many Activities
Stage I: Free Play or Exploration
A
B
C
D
E
A'
Exploration of Activities (decision-making)
Planning
Redefine Problem or activity
Execution of Project Symbolic shifting
Evaluation (child)
Evaluation (teacher)
Aide Education
Parent Education
Volunteer Education
Reports to Peers
Reports to Parents
Reports to Child
Exploration of FUTURE Activities
?
?
?

Level D: Evaluation--The evaluation of the project has been designed so as to incorporate comments by both the child and the teacher. In the first instance the child should be encouraged to write, to explain, to communicate in some way his evaluation of the project. In the example in which the child builds a house of blocks, that child might be asked questions such as: "Is this house like your house?" "Is this a big or small house?" "Who could live in this house?" "Do you like this house?" In a sense, the child's evaluation should tell more about the project than is obvious from simply viewing that project. This is a key idea, since earlier in this paper a proposal was made that much of childhood learning and development is process oriented. If an adult merely views the child's product, little of the process involved will be evident.

"TELL ME MORE ABOUT IT"

Evaluation by the teacher should be carried on at a more analytic level, although many of the nine catagories which will follow may be appropriate for the more advanced child to include in his own written evaluation. These nine learning/evaluative catagories are as follows:

Readiness for Exploratory Learning

1. Awareness of the environment--to learn, to develop, the young child must be aware that he is surrounded by an environment in which process is possible. That is, the young child who is to benefit most from a responsive environment is one who has the abilities to sense, absorb, respond in a meaningful manner to that environment.

2. Spirit of Inquiry--the child should be helped in terms of developing an ability to face in a structured manner the questions which are presented by the environment. This means more than having a mode for experimently handling ideas, for it extends into the field of developing an ability to voluntarily and independently identify questions, to project ideas, to seek out pertinent data, and to arrive at conclusions concerning these ideas. This meaningful, self-directed ability is essential if interest center learning is to be effective.

THIS CHILD IS LEARNING TO EQUATE IDEAS

Learning about Rigid, Law-Bound Systems

3. Physical Laws--when the child encounters physical objects in a natural setting there are certain properties of these objects which are constants in relation to the child's learning. These are exemplified in terms of weight, form, color, and texture. Blocks don't roll because of their FORM, a rigid law which anyone can discover.

"SOME FLOAT, SOME DON'T. WHAT ABOUT THIS ONE?"

4. Logical Operations--many years ago education was much more concerned with the development of a child's structured thinking ability. This perhaps reached its peak in terms of the exercise of debate skills, an activity in which the laws of thinking gained precedence over amassing facts.

In terms of logical knowledge, there are about five abilities which are appropriate to the child prior to the age of 12. The first of these is CLASSIFICATION, or the ability to group objects together based upon an analysis of the properties of these objects. In terms of teaching, this is often exemplified by similarities and differences, sameness, and going-togetherness. The second is SERIATION, or the ability to arrange objects along a continuous dimension. Teachers will often see this occuring as children order with reference to length, color, quantity, size, and quality. Next is NUMBER, or the ability to arrange objects on a basis of one-to-one correspondence. This may be seen as the child matches groups of cups and saucers, houses and trees, or girls and boys. The fourth ability is SPATIAL, or ability to deal with space. By definition many of the spatial concepts are tied to the linguistic catagory of prepositions, such as over and under.

The last logical ability deals with TIME, which refers to the ability to understand and use temporal sequences. The young child who understands that in working in the Washington Center he must first decide upon an activity, then plan for it, execute the activity, and evaluate it, has begun to understand basic temporal aspects of his educational process.

Learning about Flexible Systems

SOCIAL ROLES CANNOT BE IGNORED

5. Social Acknowledgement--At this level there are about two kinds of knowledge of interest to the children. First of all, they need to have knowledge concerning social information, an area dealing more with social or occupational roles. Secondly however, they need to know more about normative behavior in such areas as cooperative work and cooperative play. Beyond the knowledge level, however, they need to move into a realization of personal social responsibility, such that their own behavior is structured in accordance with the laws and ways of one's society.

6. Symbolic Synonyms--a second area which does not conform to a rigid set of rules but which does operate within flexible boundaries is the area of symbolic synonyms. The very young child is a gold mine of symbolic activity, using his body to represent objects, to participate in make-believe, and to construct two and three dimensional representations (pictures and objects) exemplifying that child's play and imaginative behavior. Each of these tends to serve the child as representations of real and hypothesized events.

   The young child also shows rapid growth in the development of language skills. Not only is the child working on the rule structure of his language, but also acquiring skill in the use of synonyms, antonyms, and homonyms. There is little question but that in nearly all countries of the world at the present time, the child's ability to use language skills fluently represents to that child the most widely useable system of symbolic representation. There is flexibility, however, in that more than one word may stand for an idea or objects (synonyms).

   Finally, reading represents an even higher level of language representation in that it allows for a time-free conveyance of language skills. Again, while the field of reading is thought to be structured according to a set of laws, most teachers are well aware that the reading-symbolic system is flexible in terms of having a large number of exceptions to all of those laws.

Learning about Unstructured, Non-Rule Systems

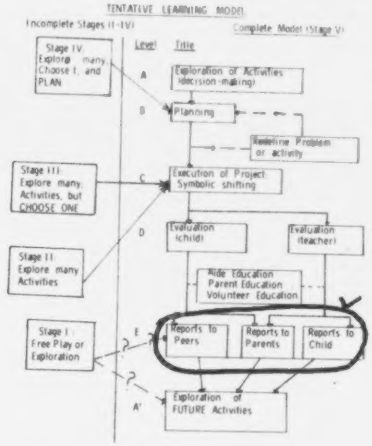
7. Appreciation Valuing--children need to learn that objects and persons gain value because the child has appreciation of those objects and persons. There is no set of laws which governs this value system, but it does represent one area in the child's life in which things may be valued without having to explain that valuation.

8. Other Valuing--The child also needs to learn that if he has the right to give value to something because of an undefinable attribute of that thing, the same right should be extended to other children. This means that children need to learn to understand the value system of other children, and to allow these value systems to exist side by side with this child's own system.

9. Interests--Finally, there are no laws which govern the kinds of activities which will interest the child. There is a great deal of evidence which tends to show that the child's interests are culturally determined, but within that cultural determination exists a wide range of demonstrable interest. It is necessary that the child does develop some interest, however, for without interest the teacher must depend upon extrinsic motivation in order to insure the child's progress through learning situations.

   (At this date enough information has been gleened from the learning model so that a potentially effective educational program for concerned adults could be constituted. That is, aides, parents, and volunteer educational workers could be trained in educational process by using the model as it has been constituted to this point.)

Other evaluative dimensions, particularly those which exist more as sets of trainable skills (motor skill, decision-making, planning, representation, and prediction), are discussed in Chapter IX, AN EVALUATION FORMAT.


TENTATIVE LEARNING MODEL
Incomplete Stages (I-IV)
Complete Model (Stage V)
Level
Title
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A
Exploration of Activities (decision-making)
B
Planning
Redefine Problem or activity
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C
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D
Evaluation (child)
Evaluation (teacher)
Stage II: Explore many Activities
Aide Education
Parent Education
Volunteer Education
Stage I: Free Play or Exploration
E
Reports to Peers
Reports to Parents
Reports to Child
?
?
A'
Exploration of FUTURE Activities

Level E: Report--After the evaluation has been concluded by both the teacher and the child, movement should be made into the report level of the activity. Since the evaluation was conducted by both the teacher and the child, the report should also have the child and teacher aspects to it.

As far as the child is concerned, the usual mode of report would be a demonstration or exhibit, both conducted for the peer group. This is intended to include the sharing verbalization so often a part of the young child's classroom. A second part of the child's report should be directed towards the parents. One suggestion would be that the child either prepare a report for the parents on his activity, or draw the parents into the school setting to work with him in that activity. In the latter case the child would become the teacher to the parent, a more interesting format than that which has usually been a part of the PTA meetings.

As a result of the teacher's evaluation, a report should be made both to the child and to the parents. It is recommended that these reports should be separate in that the teacher may want to convey information to the child which is not available to the parents, and vise versa.

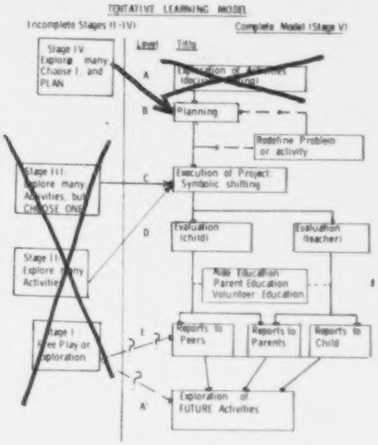
"THIS IS MINE"

PROGRESSION INTO THE WCECE MODEL

To this point only the complete WCECE learning model has been presented. It is obvious, however, that a young child does not start with the ability to solve problems as indicated in Stage V of this model. That is, an important educational and developmental task is to identify the stages by which a child progresses from a more or less free play orientation into the ability to explore and solve problems.

The remainder of this explanatory report will take the reader sequentially backwards through the four stages which are postulated as preparatory to the complete ability to solve problems.

STAGE IV: NEARLY COMPLETE PROBLEM SOLVING


TENTATIVE LEARNING MODEL
Incomplete Stages (I-IV)
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Level
Title
Stage IV Explore many Choose I, and PLAN
Stage III Explore many Activities, but CHOOSE ONE
Stage II Explore many Activities
Stage I Free Play or Exploration
A
B
C
D
E
A'
Exploration of Activities (decision making)
Planning
Redefine Problem or activity
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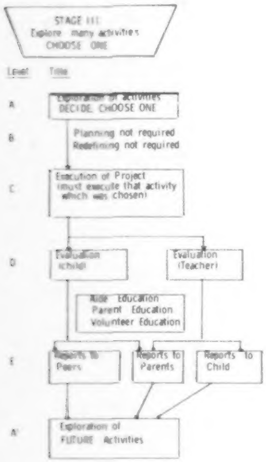
Evaluation (teacher)
Aide Education
Parent Education
Volunteer Education
Reports to Peers
Reports to Parents
Reports to Child
Exploration of FUTURE Activities
?
?
?

At a slightly lower level of compentency, children should show a nearly complete ability in terms of inquire-based problem solving. For example, they should be able to explore activities, plan, redefine problems, execute projects, and participate in the evaluation of those projects. In the initial stages of this problem solving, however, the child may be expected to incur problems in terms of redefinition of the problem. That is, the child at this stage may exhibit inability to plan and replan while continuing his orientation towards the solution of one particular problem.

The distinguishing feature of Stage IV learning, therefore, is that the child may not develop an irreversible decision. After repeated attempts at the redefinition of the problem, the child may be allowed to disgard the present set of problems and activities, orienting his attention towards the exploration of an entirely new set of activities and problems.

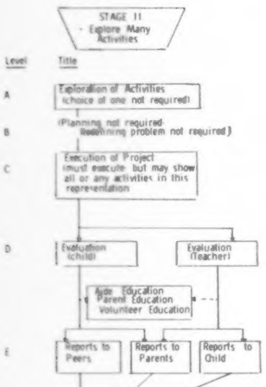
STAGE III: PROBLEM SOLVING WITH HELP IN PLANNING



At an even earlier level of learning, childhood learning and development can be pictured as the exploration of many activities, followed by the choosing of only one activity or problem. At this stage the child is to be expected to orient his attention towards that one problem, working in that problem-type situation for a specified period of time.

During the execution of this project, the child will be expected to quantify in some manner his progress within that activity. The distinguishing feature of Stage III learning is that both decision-making and planning are short circuited in favor of a direct approach to the execution of a project or activity (see Diagram 7b).

STAGE II: SIMPLE PROBLEM SOLVING


STAGE II
- Explore Many Activities
Level
Title
A
Exploration of Activities
(choice of one not required)
B
(Planning not required
Redefining problem not required)
C
Execution of Project
(must execute but may show all or any activities in this representation
D
Evaluation (child)
Evaluation (Teacher)
Aide Education
Parent Education
Volunteer Education
E
Reports to Peers
Reports to Parents
Reports to Child
A'
Exploration of FUTURE Activities

At an even earlier stage of inquiry, the child may be allowed to explore many activities over any one period of time. Fewer rules would tend to govern his behavior while in these activities, but he would still be expected during the execution of the activity to follow up with some sort of quantification or pictoral representation (see Diagram 7c).

The distinguishing features of Stage II learning are that the child is allowed to circumvent the decision-making aspect of exploration and the forethought involved in planning and redefinition of problems. In addition, the child is not expected to stay with any one activity over any period of time. It is this latter point which distinguishes Stage II from Stage III learning.

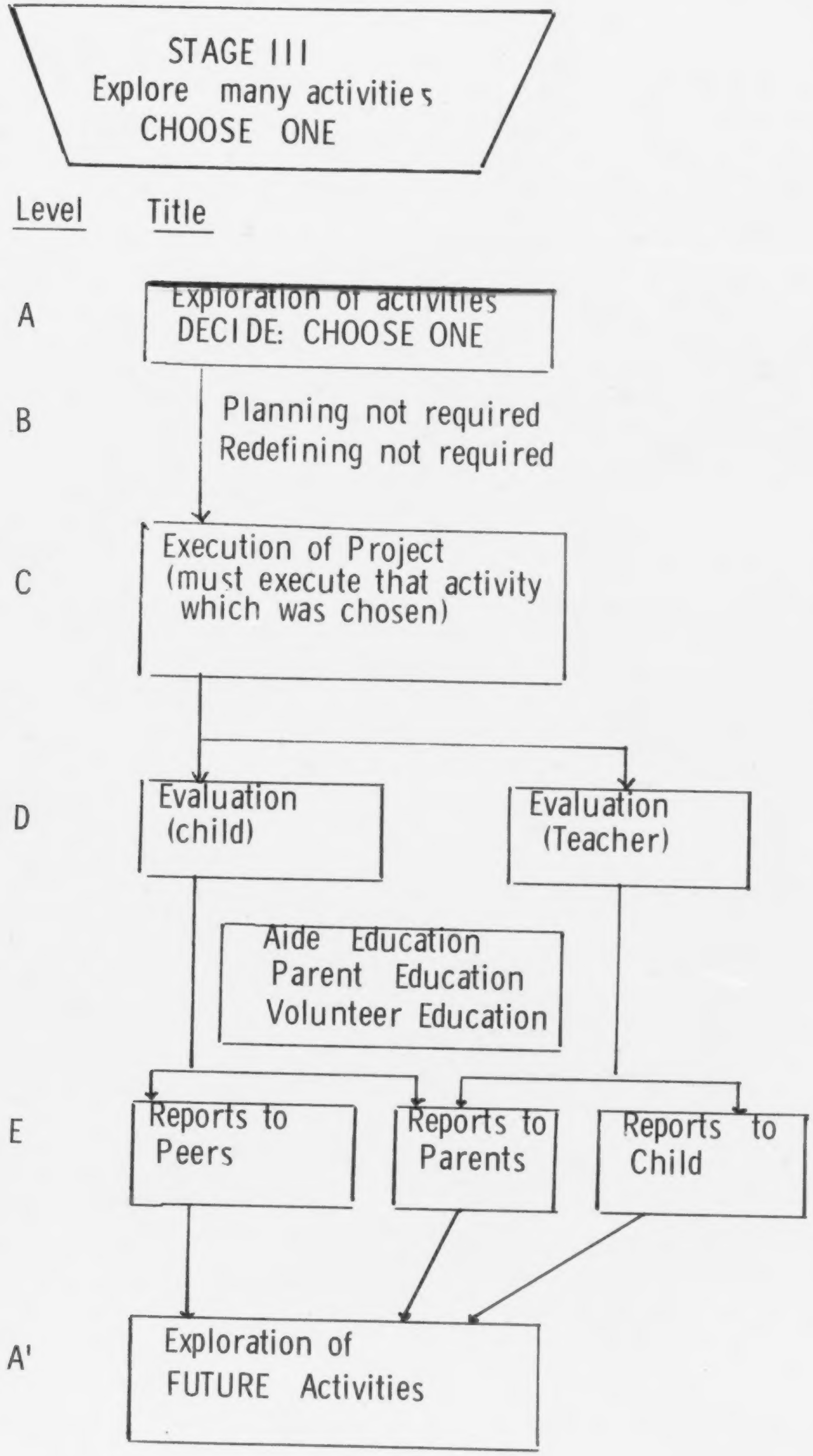

STAGE III
Explore many activities
CHOOSE ONE
Level
Title
A
Exploration of activities
DECIDE: CHOOSE ONE
B
Planning not required
Redefining not required
C
Execution of Project
(must execute that activity which was chosen)
D
Evaluation (child)
Evaluation (Teacher)
Aide Education
Parent Education
Volunteer Education
E
Reports to Peers
Reports to Parents
Reports to Child
A'
Exploration of FUTURE Activities

Diagram 7b

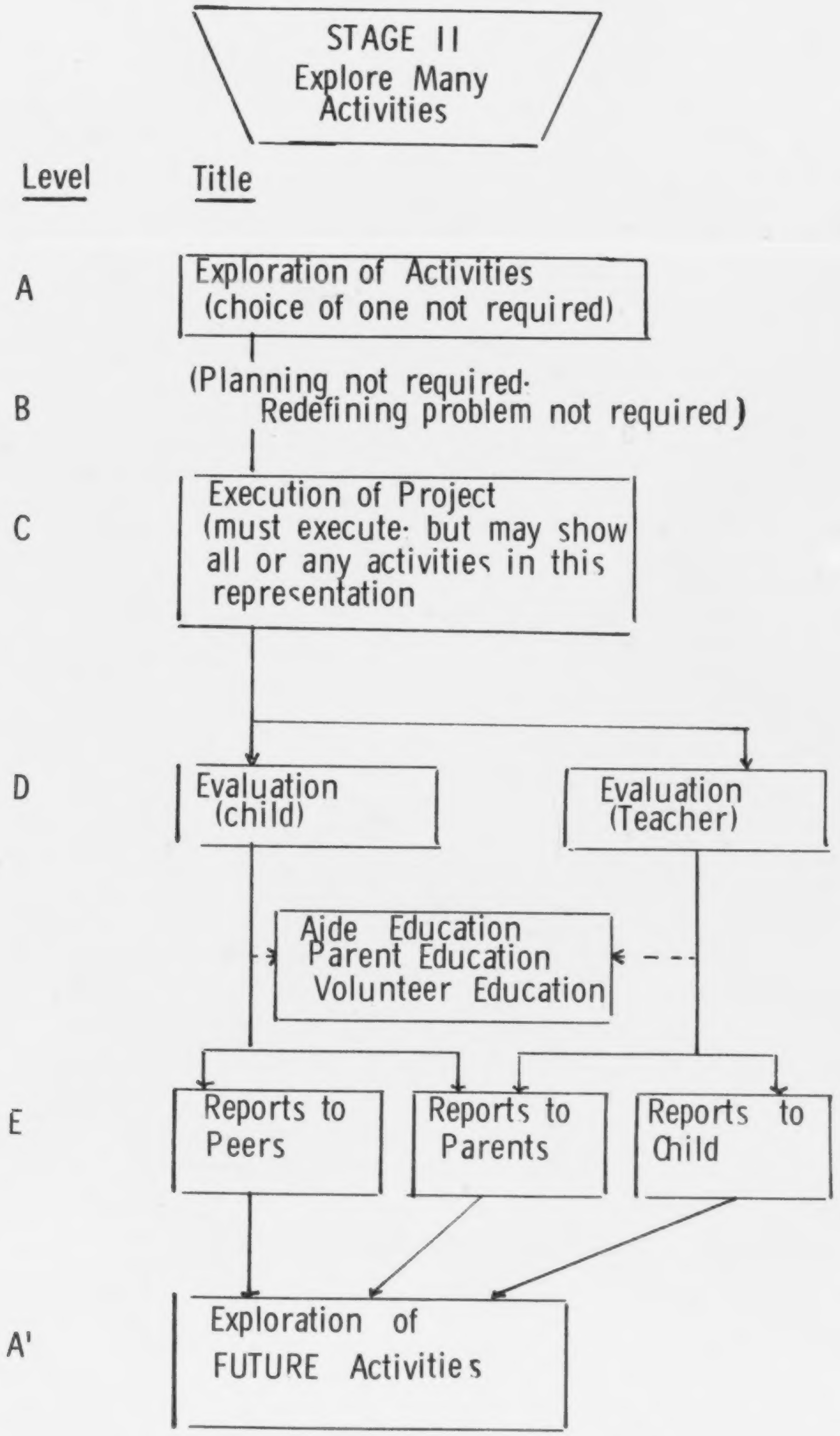
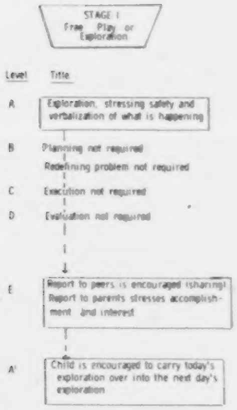

STAGE II
Explore Many Activities
Level
Title
A
Exploration of Activities (choice of one not required)
B
(Planning not required·
Redefining problem not required)
C
Execution of Project (must execute· but may show all or any activities in this representation
D
Evaluation (child)
Evaluation (Teacher)
Aide Education
Parent Education
Volunteer Education
E
Reports to Peers
Reports to Parents
Reports to Child
A'
Exploration of FUTURE Activities

Diagram 7c

STAGE I: THE CHILD'S INTRODUCTION TO PROBLEM SOLVING


STAGE I
Free Play or Exploration
Level
Title
A
Exploration, stressing safety and verbalization of what is happening
B
Planning not required
Redefining problem not required
C
Execution not required
D
Evaluation not required
E
Report to peers is encouraged (sharing)
Report to parents stresses accomplishment and interest
A'
Child is encouraged to carry today's exploration over into the next day's exploration

At the earliest level of inquiry, the child can be pictured as engaged in free play. That is, to the adult there often seems to be a lack of both rules and decision making behavior. This can be considered erroneous, however, since the child is being governed by those rules which he applies through role playing.

By its very nature, Stage I learning or free play does not necessarily lead towards any other level of representation or decision making. It is enough that the child be considered involved in an exploration of the environment, governed only by those rules and roles which the child sees daily as setting boundaries upon his environment (see Diagram 7d).

Teachers will find it hard to get children of this age to EVALUATE themselves. They should work towards getting them to REPORT (share) at the end of the day, and to use this as the basis for helping plan what to do tomorrow. This will help the teacher plan a "Family meeting" for the next day, and it helps make decisions as to what materials to make available.

REMARKS

The six steps in Stage V of the complete WCECE tentative learning model might be summarized in the following manner:

1. The choice of activities is explored and is student directed BUT leads to a commitment of the child through a decision-making process.

2. Planning and replanning is involved, rather than discarding an attempt to analyze an unexpectedly complicated problem.

3. Execution of the project involves a great deal of quantification, graphing, or some other style or representation and storage of data. This is characteristic of the phase of symbolic shifting.

4. Evaluation is made by both the teacher and the child.

5. Reports are made by both the teacher and the child.

6. Level A: Exploration of Future Activities--The purpose of the reports by the child and the reports by the teacher to the child have been to increase the child's understanding of his growth in knowledge. To the extent that this is effective,

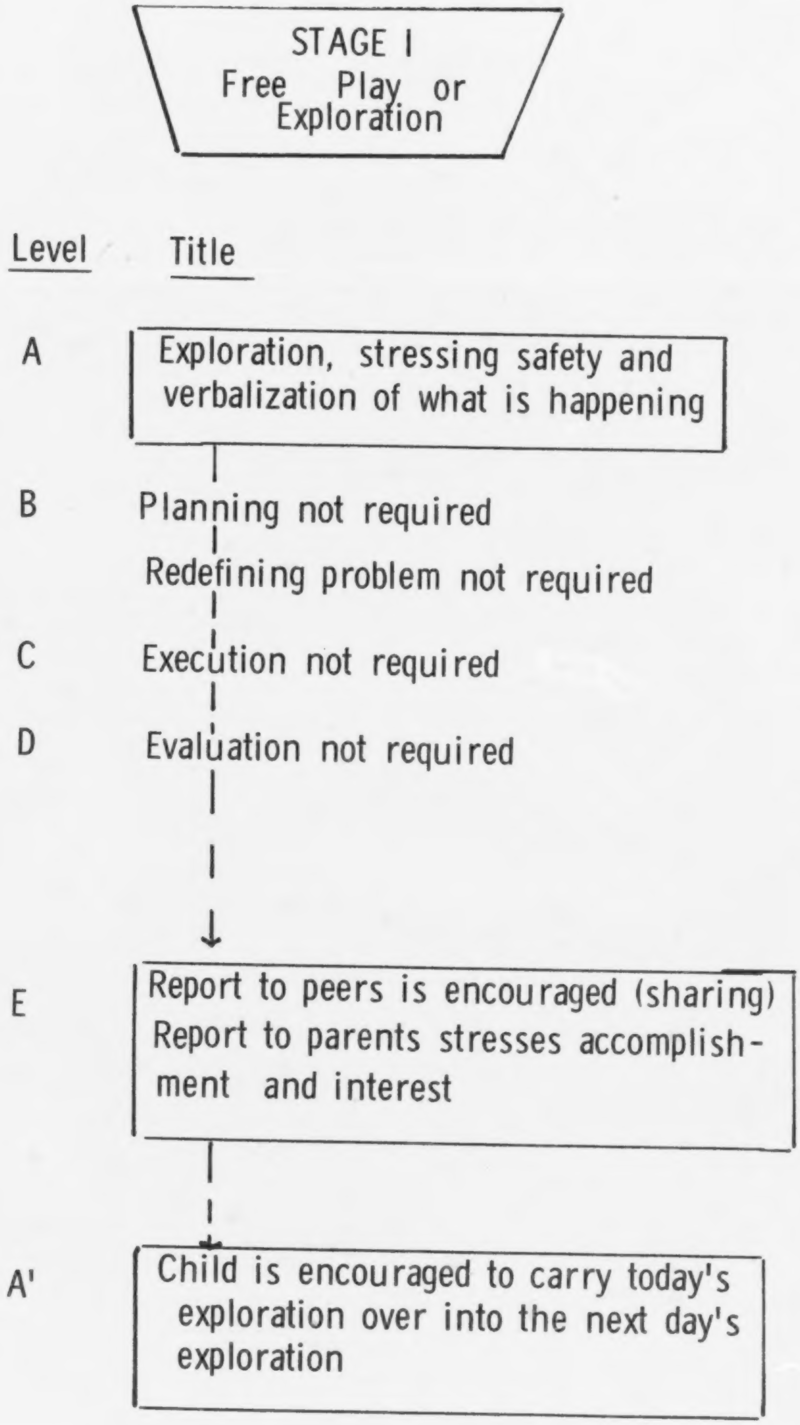

STAGE I
Free Play or Exploration
Level
Title
A
Exploration, stressing safety and verbalization of what is happening
B
Planning not required
Redefining problem not required
C
Execution not required
D
Evaluation not required
E
Report to peers is encouraged (sharing)
Report to parents stresses accomplishment and interest
A'
Child is encouraged to carry today's exploration over into the next day's exploration

Diagram 7d

the learnings evidenced in the first project should become a part of the child's exploration as he moves into future activities. This tends to tie activity to activity, project to project.

SOME VERY IMPORTANT IDEAS: A SUMMARY

It is important that the reader note that, other than in Stage I, all other stages incorporate all aspects of the model from execution of the project at Level C through exploration of future activities at Level A. This is an important point, for it is the manner in which the WCECE model differs from the models derived from the British Infant or Primary Schools. The child is to be asked to represent in some manner what he has done. This might be termed symbolic shifting. For example, if the child has been involved in role playing, that role playing is symbolic of actual activities as perceived by that child. At Level C the child is asked to shift that representation into a different field, such as represented by verbalization (dictation) or drawing a picture. The British approaches assume that this shifting and evaluation will take place.

Symbolic shifting is an important point in the process of learning as exemplified in the WCECE Model. As the child learns to read, he is shifting from one symbolic system (printed) into another symbolic system (verbal). As the child progresses from free play into more structured learning, he should therefore be involved in continual approaches to symbolic shifting.

Rather than striving to be unique, the WCECE learning model tends to emphasize the most viable aspects of that which is currently available in terms of theorization and application in the current early childhood education scene. Attention has been focused upon how to explore, decision making, redefinition as a part of or alternative to discarding a problem, symbolic shifting as a part of or immediately following an activity, and a fully defined system of evaluation eminating from both the child and the teacher, but emphasizing the child's evaluation of himself.

By focusing upon a continuum of learning stretching from infancy to 8 - 10 years of age, it is hoped that LEARNING STYLE AND PROCESS can be seen as bridging the gap between learning in early and middle childhood.

Keep in mind, then, the important limitations placed upon each of the levels or processes in the total divergent problem-solving process:

A. Safe and profitable exploration.
B. Planning (if the child is old enough).
C. Execution (presenting one or many solutions).
D. Evaluation (by the child as well as by the teacher).
E. Reporting (to peers as well as to the teacher).

CHAPTER VIII

THE WCECE LEARNING MODEL, TEACHING, AND CURRICULUM

INTRODUCTION

In the preceeding chapter the WCECE Learning Model was described in detail. The complete model is Stage V, or Adult-Level Problem Solving, which indicates by its very title a rather complete and complex set of skills.

Children do not think as adults, however, and cannot be expected to solve problems in an adult manner. It is, therefore, important that educators begin to develop ideas about the application of children's thinking, so that children can receive training in gradual movement towards being effective problem-solvers.

But educators must work constantly with the concepts of curriculum and teaching style, too. The purpose of this chapter, then, is to advance tentative ideas about a statement made earlier in the text: The WCECE Learning Model does not specify teaching style or curriculum; it only forces the teacher to focus attention upon the child, looking at the child's response as the child's interaction with curriculum, with a teacher, and with peers.

TEACHING STYLE AND THE WCECE MODEL

There has been a great deal of interest in teaching style throughout the years. In essence, the traditional approach has been one which places the teacher in direct control of students. The role of the student then becomes one of listener, discussant, or directed experimentor.

In contrast, there is a current movement towards more of an open approach; open in the sense that more behavioral options are made available to students.

The WCECE Learning Model is usable by teachers who use either the traditional or open approach. In a sense, the most pertinent question is: How much of the learning situation is controlled, directed, or influenced by the teacher, and how much by the student? How much exploring does the student do? How much choice and decision making? Who plans? Is there a standard method of reporting results, or does the student lay out a report system?

CURRICULUM AND THE WCECE MODEL

From the foregoing discussion, one can surmise that curriculum plays a secondary role. The questions about exploring, choice, decision-making, planning, and reporting are ones which focus attention upon learning skills. A very standard curriculum might be in use, one which is tied to workbooks. If this is the case:

1. Exploration is restricted unless the teacher proposes the use of supplementary materials.
2. Choices and decisions are minimized as are plans, since the material is laid out in workbook form.
3. Execution may follow the workbook plans, or free writing or enrichment used to place more emphasis upon student-direction.

A GENERALIZATION

By now the reader is surely aware that the model is flexible in terms of its relationship to both teaching and curriculum. It determines neither--it adds a dimension to both. It recognizes that the teacher cannot make up all curriculum, but in using the curriculum, the teacher must be observant of the dimension of the child's development in problem-solving. That's the added dimension.

> THE MODEL ASSUMES THAT A STUDENT APPROACHES ALL SCHOOL WORK FROM A PROBLEM-SOLVING VIEWPOINT. ALL CURRICULUM EXISTS AS VARIOUS LEVELS OF DIVERGENT PROBLEM-SOLVING. THE TEACHER IS POTENTIALLY A DEFINER AND FACILITATOR IN A PROBLEM-SOLVING ENVIRONMENT.

Even the most rigid, structured teacher presents (to students) a problem-solving set of situations. Even a tightly sequenced workbook presents (to students) a problem-solving set of situations. It is only that the student's efforts in these cases take a less academic direction. Students may be asking: What is it that my teacher wants? What is it that this workbook question is after? Neither question is truly directed towards an academic problem.

Is the student's job, then, to figure out what response satisfies a teacher's question, or what response is right in a workbook? Or is the student's job to find and answer a question in such a way that the response satisfies that student?

THE MODEL'S JOB

In the preceeding argument, the basic question becomes: What is the problem-solving situation as perceived by the student? This is what the WCECE Learning Model is set up to analyze.

SUMMARY OF STAGES IN THE WCECE LEARNING MODEL

It is not easy to visualize sequencing children into a full-blown ability to both define and solve problems in an open-ended manner.

That is the motivation behind breaking the model down into the stages discussed in Chapter VI.

STAGE V: Adult-Level Problem Solving

STAGE IV: Nearly Complete Problem Solving (Differs from Stage V in that the child may set aside a problem or activity, rather than redefining that problem or activity.)

STAGE III: Problem Solving with Help in Planning (Differs from Stage IV in that the child progresses directly into the activity with little or no planning. That activity must be represented at the execution level, however.)

STAGE II: Simple Problem Solving (Differs from Stage III in that the child explores many activities, and any one or all of those activities may be represented at the execution level.)

STAGE I: The Child's Introduction to Problem Solving (Differs from Stage II in that no execution is required. The child is merely learning to explore the environment in such a way that the exploration is safe and profitable.)

SKILLS USED IN THE WCECE MODEL

As also discussed in Chapter VII, there are five skills which are needed by the child (to varying degrees) in most of these five stages. They are exploring, planning, executing, evaluating, and reporting.

These five skills can be learned. Therefore in the following section each skill will be defined, and curricular examples appropriate to developing each skill will be defined.

Exploration: Definition

Exploration is a student-directed, teacher-reflected process of exploring alternatives. The child looks at materials or an activity in terms of questions, such as: What is it? What can I do to it? What can I relate it to?

Exploration: Curriculum

Activity: Water Exploration

Goals: Exploration

What floats?
What sinks?

Water makes noise
Water can be absorbed

Water has force

Water may have color
Water will take shape of a container

Water can be mixed with ingredients
Water makes drops
Water flows

Time: Free

Age: 2 years - ?

Room arrangement: Area where water spillage will not be a restriction

Materials: Water table, tubs or basins
eggbeater, straws, eyedropper
plastic aprons
plastic drop cloth for floor

Description of Activity:
Freedom to explore with equipment provided. Exploration of certain areas or concepts may be somewhat controlled by equipment provided. Children should understand any restrictions that are put on the water exploration. Adults present reinforce concepts that are discovered by the children.

Related Activities:
Walk in the rain--catch drops in bucket, in mouth, in hands
Water can be used in housekeeping area for living purposes
Add dirt for mud play

Teacher Comments:
What's happening to the water?
Look at that eggbeater go?
It's all right--we have towels!

Student Evaluation:
Comments made during and after the activity

Teacher Evaluation:
Who participated?
Were there any fears?
What properties of water were observed?
What can be provided for further water exploration?

Parental Feedback:
Where can you find water at home--can Mom and Dad help you?

Planning: Definition

Planning is that skill which leads to the further analysis of that which was explored. In essence, planning leads to the development of a problem; a feeling for "something needs to be done" or "something is wrong."

Since planning is an analytic skill, children often have the feeling that the problem or activity cannot be worked with. Therefore, choice (or decision-making) becomes a partner to planning. With younger children, teachers may have to give in a let the child re-decide. Older children are not allowed to re-decide; they are encouraged to stay with the original problem, but to restate it or cut it up into manageable portions.

Planning: Curriculum

Activity: Shapes--Pumpkin to Jack-o-Lantern

Goals: To plan a face for the Jack-o-Lantern
To discover a use for shapes

Time: According to how long the planning activity is relevant to the child

Age: 3 years and older

Room Arrangement: Art Center at floor level

Materials: Felt pens
Small paring knife
Paper plates
Pumpkins cleaned

Description of Activity:
A planning session for:
the type of face (funny, happy, sad)?
What shapes shall be used to execute the above?
What needs to be done to cut out the shapes?
Who shall do it?

Teacher Evaluation:
Who participated and how?
Did the children feel that they had a definite purpose in the planning?

Student Evaluation:
Did I participate and help plan the Jack-o-Lantern?
How do I feel about the results?

Parental Feedback:
Can the child plan his Jack-o-Lantern at home?

Execution: Definition

As a child works through a project, it is inportant that findings be stated and held in some permanent way. In this way the child learns to give importance to his/her intellectual endeavors. This could be done by drawing pictures, graphing, dictating stories, tracing around objects, tracing "shadows" as made on the overhead projector, tape-recording interviews, etc.

Execution

General Goals: One way to execute in a project is to symbolically shift from one mode of representation to another. For example, a boy may first tell the class about his study of brine shrimp, and then symbolically shift this knowledge by writing a report about the shrimp to keep in his notebook. Here, as in many cases, the purpose of the symbolic shift is to permanently hold data.

Time Allotment: This depends on the student's needs. He should be given the time he needs to finish.

Student Background: This activity has been conducted with a class of seven year old children.

Room Arrangement: Any room arrangement should work.

Materials and Supplies: Brine Shrimp, clear plastic cups, microscopes, paper, pencils, crayons, and salt solution (1 tablespoon of salt to 1 cup of water)

Description of the Activity: After the brine shrimp are large enough and are moving around in the plastic container of salt solution the children can put them under the microscope to get a good view of what they really look like. After this has been done the child is capable of explaining what the brine shrimp look like to his teacher or fellow classmates. It is at this time that symbolic shifting can take place. The child uses the art material (paper, pencil, and crayons) to draw the brine shrimp for others to see later or to remind himself later just what a brine shrimp looks like.

Introductory Comment: "Today I would like you to take a close look, under the microscope, at the brine shrimp that you have been growing. Then I would like you to represent them on paper for me and the rest of the class in case we don't get a chance to see your project today."

Evaluation: Definition

Evaluation of a child's project by that child is difficult to attain because very young children tend to view that which they've produced as being perfect; very satisfying. Therefore, evaluation involves skill in orienting children towards analysis by the use of questions, such as: Is it a big tree? Does it have apples on it? Can you climb it? Do you have a tree like it at home?

With older children, the end result is to produce a problem-solver who can look at a problem in terms of the question: Does the answer I've arrived at satisfy me?

Evaluation: Curriculum

Name of activity--Mathematical problem-solving with the use of dice

Goal--To present data in tabular form so that the tabled results satisfy the children.

Time--Relative

Age--5 years - ?

Room arrangement--Area where small groups of children can throw dice and record the numbers

Materials--Two dice for each group, graph paper, pencil and paper

Description--Have the children throw two dice to discover the combinations which they can make. Many different dice games can be used while the children explore with the dice. Some of the children may discover that some numbers come up more often than others. Ask the children to find out if one number comes up more often than any other and to show and tell you what they find out. It would be best to divide them in groups of two to four to work on this problem. If a group does solve the problem have them discuss their method and solution with the other groups. (If the children are unable to solve the problem the teacher will need to demonstrate the need to record and graph data to find the answer.)

Student evaluation--Student satisfaction with his/her method and solution

Teacher evaluation--Whether the students were able to utilize a problem-solving method in attacking the problem.

Parental Feedback---The child explains the activity and describes what he did. The teacher should also explain the activity and its purpose in her newsletter home.

Related activity----Why do some numbers come up more often?

Reporting: Definition

No problem has been solved until the child can convey the results to peers. For younger children, reporting is very non-critical, much like sharing. Older children tend to question the results, to ask: Do the results represent anything new or meaningful to me?

Reporting: Curriculum

Name of Activity: Reporting

Goals: To be aware of day's happenings.
To report personal accomplishments
To give awareness of time passing

Time: 3-4 minutes (extended if needed)

Ages: 3-5 year olds in group setting

Room Arrangement: Children come together in group (family meeting)

Materials needed:
Large circular shaped week calendar on wall or bulletin board.
(At child's level of reach)

Description of activity:
"Today is a new day"
"Let's move the arrow to 'one more' day"
"Today is Monday"
"Would someone like to share what they are doing at school today?"
"Has anyone else done something of interest to them?"
"Tomorrow we can look forward to ...."

Related Student Activities:
The concept of "time" in other forms
Math concept of "one more"
Planning activities together

Teacher Evaluation:
Participation by children

Student Evaluation
Am I a part of today's happenings?
What did I do that especially interested me?
Can I help plan future activities?

Parental Feedback:
Awareness of the events that interest the parents' child
The ability to report to parents by the child

Editor's note: The relationships or interactions among teaching style, curriculum, and learning (or problem-solving) are of continuing interest to the WCECE staff. Therefore, a more complete outline is attached as Appendix A.

CHAPTER IX

AN EVALUATION FORMAT

INTRODUCTION

As in any educational system, a method of reporting student achievement must be devised. This method must, of course, be keyed to the WCECE Learning Model.

Therefore, a Child-Evaluation Format was designed. It appears as follows in Diagram 9a.

PROBLEMS

This is presently not a precise guide. At best, it serves as an outline for discussion and understanding. If a child performs poorly in estimating the answer to a math problem, the report to the parents would stress that child's problem in the areas of PREDICTIONS made in RIGID-RULE SITUATIONS. As beneficial as this is, it does not lend itself to precise estimates of skill development; the recourse is to rely upon the professional skills and judgments of teachers.

Secondly, it is important that judgments be made as to what level of problem-solving skill in general is usually exemplified by a child. In Chapter VIII, these levels were specified as:

STAGE V: ADULT-LEVEL PROBLEM SOLVING
STAGE IV: NEARLY COMPLETE PROBLEM SOLVING
STAGE III: PROBLEM SOLVING WITH HELP IN PLANNING
STAGE II: SIMPLE PROBLEM SOLVING
STAGE I: CHILD'S INTRODUCTION TO PROBLEM SOLVING

The most significant problem is that the Learning Model operates in interaction-type situations. It is very probable, then, that a child will not be at only one stage in terms of problem-solving ability. The child will probably operate in several stages.

For example, the first requirement is that the RULE BOUNDARIES of the situation be determined. Math and science activities depend upon knowledge and use of RIGID RULES, reading is learned as a more FLEXIBLE RULE situation, and artistic expression or musical enjoyment can be RULE-FREE. The greater the number of rules, the more use the student can make of PLANNING and PREDICTION. The fewer the number of rules, the less defensive a student needs to feel about EVALUATION.

For many young children, a factor of SKILL must also be considered, even though skill is not specified in the Model. Younger children, for example, might choose (CHOICE) to play with small blocks, but

TENTATIVE CHILD-EVALUATION FORMAT: WCECE

PROCESS AND PROCESS-RELATED EVALUATION CATEGORIES:

Rigid-Rule Situations: Those areas in which the child solves problems by using sets of rigid rules, such as mathematics, science, and formal logic (reasoning).

Flexible-Rule Situations: Those areas in which the child solves problems by using sets of rules which are true only some of the time. These rules then function only as guidelines, such as in reading, social interaction, social studies, history, and language development. Much of what we teach a child falls in this category.

Non-Rule Situations: Areas of life in which the child learns that an object has value if he likes it; a doll has value because another child is fond of it. Some children may be interested in carpentry but not in playing with large blocks, and no one can reliably explain why a child's interests are as they are. This area covers the child's beliefs, his values, and his interests.

Skills: Many of the child's accomplishments are based upon having an adequate set of sensory motor skills. Competency and movement through the rule situation can be greatly affected by such skills as large motor muscle development, small motor muscle development, motor coordination, and visual-perceptual development.

SKILLS IMPLIED IN THE WCECE LEARNING MODEL

Exploration: Does the child know how to explore his/her environment safely and profitably?

Decision-Making: Can the child choose an activity and stay with it? Are the child's actions consistent with what he/she has said he/she is going to do?

Planning: Does the child know how to plan? Has the child learned to ask "what do I need? What will I be doing?" Has the child learned to analyze?

Multi-Mode Representation: Can the child hold data on a project or activity in more than one way? If he has built a tower of blocks, can he draw a picture of it? If he has written a report on the City of Ellensburg, can he accompany it with a graph or map? If he has learned to stack and generally play with a set of blocks, can he identify them in a feely bag, or trace around them, matching the tracings with the actual blocks?

Prediction: Can the child anticipate some of the things that will happen in an activity before he participates in that activity? Before he plays with the aluminum foil, ask "Do you think this will float?"

Evaluation: Can the child tell you why he liked this activity? What would he change the next time? Did it lead to a new problem or activity.

Reporting: Can the child tell the others what he has done? Can he illustrate it?

INTRAFAMILIAL COMMUNICATION

Reporting: Can the child report to his parents IN SOME WAY his perception of how well he is doing in school? How does he perceive his learning opportunities and successes or failures?

Diagram 9a

not be able to manipulate them. When the child then leaves to work in another interest center, that leaving should not be ascribed to inability to make a choice.

There is a need, then, to develop checklist devices which yield judgments, but which are also keyed to observation of interactional factors (such as the lack of SKILLS versus ability to CHOOSE, as just discussed). These devices are still in a rough developmental stage, and much needs to be done.

CHAPTER X

OBSERVATIONS BY THE WASHINGTON CENTER FOR ECE STAFF

Finally, the WCECE staff became aware of the many practical concerns which arose as a result of implementing a model program. This initial year of the program was one of growth for all. Some things worked; others didn't.

The final chapter represents a sharing of this growth. All of the following articles were written by WCECE staff members. They derive from the staff's efforts in changing the function of the library, devising parent programs, video taping, and other concerns relevant to starting a new, internally consistent program.

ARTICLE # 1: MATERIALS, MODELS, AND MEDIA

Whether you call it a materials center, a media center, or a library, the philosophy is the same--to make materials of many types readily available to students and teachers. It is also necessary that all materials be in good condition, and packaged so that even the youngest child can help put them away. For example, tinker toys leave the media center in bright-colored plastic dish pans, light enough for a child to carry, washable, stackable, and small enough to fit on a shelf.

The materials center reflects the operating philosophy (model) of the school. At the Washington Center for Early Childhood Education a wide variety of materials can be found including: books, records, tapes, puzzles, blocks, dolls, soy beans, tempera, puffed wheat cereal and pan balances. However, the librarian as well as the teacher must be aware of how to extend the learning potential of these materials for the child. In addition, the librarian must be aware of what is going on in the classroom in order to say, "Maybe you will want to add this material to what you have." At the WCECE, all materials come under the librarian's inventory since each area of the curriculum interacts with other areas, and since all areas are of equal importance.

A wide variety of students are served at the media center--teachers, learning more about early childhood; college students, with beginning experiences in early childhood; and very young students developing skills for learning.

In the materials center, areas are established at various times to serve a particular group of children. Children may come from the classroom at any time of the day to a new environment but one that is consistent in that the child follows the same model for learning here that he finds in the classroom. For example, suppose a group (4) of children ages 5-6 come to the library and find geo-sticks and clay. They are encouraged to explore the different ways that different sizes of sticks can go together. They can explore the elasticity of the clay; what happens when you roll it, pound it, poke it? On another day they can choose to stay in the classroom, explore some more, or try the problem of building a bridge from one spot to another using only the clay and geo-sticks. They will be encouraged to test the strength of their bridge, to dictate a story about their experiences to a typist (who may type it onto a piece of acetate so that the student can project his story on the overhead projector), and share his experiences with his peers in the classroom.

A college student, on the other hand, may come to the materials center looking for a pan balance and seeds. He/she may be aware that this is potentially a good experience for children, but unaware of how to extend the experience beyond putting in seeds and watching the pans go up and down. She will learn the need for a variety of sizes of seeds. White navy beans are the same size as puffed wheat--similar in color and shape, but do ten white beans in one pan balance ten puffed wheats in another? The experience begins to expand. Can the child predict how many puffed wheats will balance ten navy beans? She will be encouraged to explore the possibilities, and select from the wide variety of seeds available those that will potentially develop the concepts that she wants to teach.

These possibilities, shown at the materials selection level aid the classroom teachers, who are working to expand experiences for the college student as well as the very young students. The teacher will continue to expand this experience for the ECE practicum student and her four-year-olds in the classroom. In other words, it is a dual teaching situation, and the librarian needs to have the same familiarity with the school model, the materials, and students that the head teacher has. In addition, these two work as a team for the selection of the materials that are desirable for early childhood.

ARTICLE # 2: PROGRAMS FOR PARENTS

Why have parent-involvement? Have you ever known all of your students before they walked into your room the first day? Did you ever become acquainted with each child's brothers or sisters? Did you know if a child was an only child, an adopted child, the youngest, middle, or oldest child? How about what the child's bedroom looked like or his favorite toy; where he played outside --did you know all of these things? During the year did you ever know what particularly concerned Mom and Dad about their child's education? Were you aware if a child had a physical disorder? Did you ever need to call on informed parents to support your classroom program? Finally, have you ever needed to ask a child's parents to work with you in solving a problem? If you were ever involved in any of the above situations, you must have realized the importance of close ties between the child, parents, and the teacher. Therein lies the necessity of a parent involvement program.

One of the most affective methods of such a program is the home visit. Home visits are made in the territory of the parent and child, which puts them more at ease. This also gives the teacher a chance to help the parents extend the learning environment into the home. There are many things done in the classroom that are more effective when reinforced at home. Parents, in turn, can give the teacher valuable background information about their child: interests, talents, or weak areas. Home visits provide an opportunity to observe interaction between parent and child. Insight to this relationship will help the teacher to better understand the child's behavior in the classroom. Perhaps most important, a visit in the home allows a teacher to shed the professional stereotype and work on a person-to-person basis with parents.

The first home visit should be strictly social. It should be done before school in the fall. Its main purpose should be to get to know the child in his home environment. This also allows the child to become familiar with the teacher. It makes the step into the classroom on the first day that much easier. Parents and teacher have a chance to become acquainted. At this time the first step toward parent involvement has begun.

The following are some general hints to remember when home visiting:

-Do contact the parents for a convenient time for a visit. Always arrive on time; don't overstay your welcome. A half an hour is usually sufficient time for a visit.
-Do know your parents' names and use them. Find out if they prefer to go by first or last names.
-Do give the parents some idea why you are coming. It may be to meet the child, to discuss the child's progress, to explain the classroom program, or to just chit-chat. In any case, the parents will feel more comfortable knowing the reason for your visit.
-Do dress comfortably and neatly, in something that could withstand a coffee spill.
-Do be careful not to let your eyes wander when speaking to a parent or going on a tour through the house. Parents might feel that you are snooping.
-Do ask parents what their special interest or hobbies are. Perhaps they would be willing to share their special talent with the children in the classroom.
-From the poorest to the richest homes you can always find something to praise parents about. However, the praise must be genuine.
-Do listen when talking to parents. Sometimes teachers forget that parents are a valuable source of information.

During the school year a minimum of two home visits should be made. The suggested times would be before school starts and in the spring.

Another component of parent involvement is the parent-teacher conference. To begin with, there are several ways to organize these conferences. Parents may come in groups of 3-5. At this time they often discuss learning or behavioral "pluses" and "minuses" their children are experiencing. Discussing among other parents often yields advice or support for each other. Also, parents are more willing to discuss with each other what they feel about the classroom program. The teacher's role then becomes one of listening. There are also the individual parent-teacher conferences. Such conferences are most critical if a child is experiencing some problem. However, they are most widely used at this time to discuss with the parent the child's progress. In any case, whichever way you choose to parent conference, remember to always begin with and emphasize a child's strong points.

A personal phone call is an additional component of parent involvment. It is a simple form of communication which shows the parents your interest and concern. A phone call may be needed if a child has been absent for more than two days. Or, how about a phone call to say, "Your child sure got along well in school today. He was involved with ______________." Perhaps a child has chosen a project that will need some assistance at home. A quick phone call to explain what type of aid will be necessary is a great help to the parents. Maybe a child's ride is late. A phone call to that mother will prevent worry. Use of the telephone can be one of your strongest steps to building parent involvment.

Have you ever considered the possibilities of using parents in the classroom? Perhaps mothers will volunteer time on days you know will be hectic because of special projects. Maybe you have a child with a specific learning problem. A mother could be trained in methods that will help to alleviate the problem. If she has the time, she could work with the child on a regular basis. If a parent comes from a foreign country, perhaps that parent would be willing to share what he knows about the country. Many parents have special talents such as music, art, creative dramatics, acrobatics, glass blower, candle-maker, etc., that would add greatly to the classroom.

Finally, in considering methods of parent involvement, don't forget the newsletter. It should be distributed to parents anywhere from once a week to once a month, but it should be on a regular basis. It should be short and to the point. A one page newsletter is sufficient. Every activity does not need to be included in detail in the letter. Instead, one or two main activities, events, or concepts could be explained. You could let children write their own newsletter and have them experience putting a newsletter together. Young children could dictate their ideas to you as you write them on the board. They could later be put into a newsletter. Any drawings, amusing comments the children have made, thoughts on education or other items of interest will add to a newsletter. The newsletter also gives you a nice diary of events that happened during the year.

Here at the WCECE the teachers have become increasingly aware of the importance of parent involvement. Every parent involvement program will be different as the needs of every educational situations differ. But, we offer you in this article a few methods we have found to be successful this past year. We hope that some of the steps given will help you on the road to a parent involvement program for your classroom.

ARTICLE # 3: CHILDREN AND VIDEO TAPING

Silly exhibitionism and natural curiosity characterize the young child's first contact with video taping. It is becoming a common practice at the WCECE and in its field-related programs to use video taping as a means of recording what is being done; for student teacher evaluation and teacher training in the ECE program.

Video taping has been done in the classrooms at the WCECE and for a variety of different purposes. One tape of a typical day in a 6-7 year old room was made and used for parent-conferences, becoming an effective way for parents to see their child's interaction in the classroom situation, and allowing them to have a better understanding of the program. Tapes such as this have been utilized by the students and teachers for self-evaluation. Some comments of the students have indicated their awareness of themselves. "I'm too bossy in the room, aren't I." Teachers also evaluate their interaction with the children and their teaching methods. When a teacher is working individually with one student the teacher can later observe other students that have been involved in varying activities in the room.

Many hours have been spent video taping in the Yakima Valley at the Parent-Child Centers and Head Start Day Care Centers. These tapes will be used to help train students in the Early Childhood Education program at Central Washington State College, where first-hand contact or experiences in this area is impossible because of time, money or location of the various programs. Tapes are edited and kept on file in the Audio-Visual Department in the CWSC library for use by students and teachers.

ARTICLE # 4: LEARNING TO LIVE

As one part in developing a program for education of the five year old child, we have attempted to create an atmosphere for learning in our room. As understanding and accepting adults, we provide a rich environment of materials to explore. The core of our program is the learning center. By regulating the number of learning centers and the challenges in each we can focus the child's learnings in all areas of development.

A decision is made by the child in selecting a center. A commitment is made as the child picks up a puzzle piece or pencil, or sings the first note of a song. Exploring, planning or creating may be next. As the individual continues in a center he may be encouraged to represent his activity through another media. All forms of expression (arts, movement, language) are considered valid. Because the selection of centers is based on interest, there is high motivation for learning. Because of the thought provoking questions posed in the centers there is a "spirit of inquiry" sparked in each child. In this setting growth of the individual child flourishes. In the school years to come, he is equiped to approach many situations, academic or otherwise.

Children themselves usually define their day's activities as "play", while we adults define our day as "work". Teachers in this learning center could characterize the five-year old's "play" as a self-education process by which he learns to live. As teachers, we respect the child's self-direction and guide him in self-evaluation in the learning center.

ARTICLE # 5: LEARNING CENTERS WORK FOR ME

My classroom is built around learning centers. Centers are one thing to one person and another thing to another, so let me clarify what I mean by the term. I group activities of the same nature together and call it a "center". For instance, the blocks, the play house, the art areas, books and tape recorder and flannel board, science things and aquarium and cages, puzzles and manipulative games--each can be a center. The room is arranged so that the areas are physically separated by dividers, shelves, book cases, and other natural barriers. Areas which are generally noisy are grouped together at one end of the room.

The use of this organizational set-up is the only way that I have found to provide a setting in which the children can really pursue their own interests. The frequency of changes in each area varies greatly. Books and puzzles may remain the same for a week, while art activities may change completely every day; or the same media may be out for a week while the teacher's suggestions may change daily. I try to take cues from the children's reactions and interests.

My program for children is based on several of my beliefs about children and learning. I think that the job of the school is to work with the child's entire person. The person who feels capable of handling his environment and making good choices is usually willing to try new ways of doing and thinking about things. He is persistent, and the fear of making mistakes does not threaten him. School should be life, not a place to just learn about "life". It should be a realistic, problem solving environment.

Education should also encourage people to make the most of their potentials and pursue their own interests. I do not believe that there are certain important facts everyone must know to be considered a successful person. This is probably one of the main reasons why the learning center approach does not frighten me.

The things that I am trying to teach--awareness of the environment, critical thinking, verbalizing feelings, creative thinking and problem solving, and the host of other things teachers try to teach--all can be taught many different ways and in all of the centers. My program is based on several other ideas which include the following: people learn best and retain more if they work with something which interests them at the time; learning should proceed at the learners own rate; and children are naturally curious and do not need external reinforcers such as stars, candy, points, or excessive praise to learn and enjoy the process. The teacher in my classroom must be a guide, a stimulator, a resource person, and one who arranges and manages the classroom for optimum student use.

I am an enthusiastic user of the WCECE Learning Model and plan activities to help the children function successfully at the level in which they are working, increasing their skills in performing the various steps of the model. I frequently encourage the children to do symbolic shifting which we share during our class meeting.

There are two different ways I have encouraged choosing. One way is to set out materials in centers and then allow the children to choose freely which things they want to work with. When I do this I usually schedule at least two special activities which lend themselves to small group interaction. I go around the room at a time when I think several children might be interested and invite them to come to ______ area if they would like to ______. Puppets and songs sometimes do the inviting. Of course, the choice is left up to the child whether he comes or not. On the average, four or five children usually come. Depending on the activity, I sometimes require that a child complete an activity once he has chosen to begin it. I let the children know if this is the case before they become involved.

The other choice arrangement I have used is to consolidate the room into four centers. Each center is color coded, and there is a board with matching tags for the children's necks. At fifteen minute intervals the children may choose a different area tag, or they may keep their present one for as many time blocks as they wish. The main feature of this arrangement is that it tends to control those children who have a tendency to jump from one activity to another. When I use this arrangement, I also have at least two special activities during the blocks which I announce at the end of a time period.

Whichever way I arrange choices, all of our days begin and end with a class meeting which is from ten to twenty minutes after the children arrive and have had time to explore the materials for the day. We do many different kinds of things at these meetings and try to vary them from day to day. We may play games, sing songs, share things and ideas, discuss things of interest, chart something, vote about some activity, and talk about what is on the agenda for the day. During our closing meeting we do the same kinds of things, with the addition that we share and discuss what went on during the day, looking at drawings and projects the children have done. We then do a final clean-up in the room.

With my teaching objectives and my personal classroom style--learning centers really work for me!!

ARTICLE # 6: A DESCRIPTION OF THE MORNING THREE-YEAR-OLD NURSERY CLASS

The setting for the three-year-old class may be described as a child-centered play school. The school environment includes nine activity areas. Children are free to explore any or all of these areas during the class period. A brief description of each area follows:

I. Blocks and Climbing Equipment--Learnings:
  - Large muscle development
  - Develop coordination
  - Creative dramatic play
  - Emotional satisfaction through construction

  Materials:
  - Equipment includes planks, large hollow blocks, unit blocks, trucks, boats, trains, family and community figures, farm animals, large climbing apparatus.

II. Story--Learnings:
  - Develop interest in books, expand knowledge
  - Develop listening skills
  - Develop self expression

  Materials:
  - Book corner contains area rug, two book racks. In addition, special activities are planned in this area.

III. Music--Learnings:
  - Stimulate natural sense of rhythm
  - Develop interest and awareness of music through records and singing
  - muscular coordination

  Materials:
  - Record player and records are available for children's use at all times. In addition, special activities are planned for this area.

IV. Creative Media Area--Learnings:
  - Develop knowledge of color
  - Provide experiences in combining media
  - Small muscle development
  - Emotional release
  - Develop identity through creativity

  Materials:
  - A wide variety of experiences are offered in this area. For example, easel painting, finger painting, clay, collage, cutting and pasting, crayons, chalk.

V. Manipulative--Learning
- Small muscle and motor skills development
- Build concepts of size, space relationships--visual discrimination
- Build number concepts through manipulation of concrete objects
- Experience in classification and seriation of materials

Materials:
- Puzzles, dominos, geometric shape sorter, lotto games, small blocks, beads and play tiles.

VI. Housekeeping--Learnings:
- Dramatic play
- Role play
- Develop cooperative social behavior
- Develop identity through imitation of adult environment

Materials:
- Small scale housekeeping equipment. Activities planned to stimulate domestic, creative play

VII. Snack and Cooking--Learnings:
- Satisfy hunger
- Provide a time for relaxation and conversation
- Provide a variety of experiences with implications in areas of housekeeping, dramatic play, science, mathematics
- Provide a variety of experiences in preparation and tasting of foods

VIII. Outside--Learnings:
- Self confidence is developed through motor skill accomplishments
- Large muscle activity
- Awareness of nature
- Emotional release and satisfaction through play in sand, dirt, water

Materials:
- Sand box, tricycles, tree house, wagons, garden tools, moon wagon
- Gardening area

IX. Science--Learnings:
- Develop awareness of nature
- Develop awareness of senses through experiences with sight, sound, smell, taste
- Develop an understanding of animals: their needs, proper care, and how best to enjoy each type.

Materials:
- A variety of experiences with animals, plant growth and other subjects relating to our natural environment

Parent Programs

An open house was held for parents in October. Following this experience I invited parents to observe the class for the two hour period. During this time I talked with them about the kinds of learning experiences their children have in the different areas. When these individual meetings are completed I have a series of meetings, giving parents an opportunity to use some of the equipment and materials, and helping them develop some plans through which they can foster maximum learning in the home environment.

In this way, parents are encouraged to view their children's activities as not just play, but as an initial step into a learning process (Stage I).

ARTICLE # 7: MUSIC: A SOCIAL ENVIRONMENT FOR THREE YEAR OLDS

The three year old arrives in the pre-school setting with little experience in large (ten to fourteen) peer group activities. He tends to play either alone or in groups of two and three. A developmental music program can assist in fascilitating the three year old's socialization process. This program can range from the very simple, personalized tune to more complex group participation.

As a teacher works with blocks he may sing a simple tune about what he is doing. Children will tend to listen and observe the adult's behavior. As the teacher fingerpaints, he may hum a tune. Again, children will react and may become involved. This can be the beginning of a music program that can become a part of the child's day . . . a part he may choose to explore (Stage I). The adults role is to give the opportunity and atmosphere for music and socialization within the pre-school program.

The initial experiences need to relate to the child and happenings that are meaningful to him.

"Jason has a doggy, a doggy, a doggy
Jason has a doggy, a doggy, a doggy
And his name is Chipper"

As the children begin coming together the emphasis will tend towards sing-song and musical fingerplays. (Where is Thumbkin?) The first sign of group cohesion with the three year old is somewhat an incidental happening. Again, the child chooses if he wishes to join the group and participate. He may choose a longer "watching time" than the child who is eager and ready to have an "active time". Soon comes the experience of action songs, individually carried out and done in an informal group setting (I'm a little teapot"). The action song may then be carried into a sharing experience using objects (brooms, mops, etc.) that need to be shared in a group situation.

"I like to sweep with my little broom
and help my mother sweep the room
Sometimes my broom is a pony strong
I get on it and gallop along

Giddy up pony, Giddy up pony
Whoa, Whoa, Whoa."

The group begins moving into singing games that need unification to exist. Socially they begin holding hands and working together to enjoy such singing games as "Ring around the Rosy", "London Bridge", "Go in and out the Windows". If they are beginning to feel relaxed and comfortable about their participation, they may begin to enjoy imaginary musical activities. Becoming different animals at the sound of certain music is a key to the listening development the children are experiencing. Snakes and elephants seem to be the favorites! The child is still somewhat independent in his actions but is within a group setting.

In a marching activity the group appears to solidify to carry out the experience. The children need to make certain decisions. Where will we go? Do we need a leader? Will I accept becoming a follower? Will we use instruments, hats, or dress-up clothes? (The children seem to march with more ease when they can use items mentioned above.) Some children seldom participate in the actual activity but may be involved with piano playing, clapping, record changing, or watching from a distance as they explore something else. Parent reactions bring the word that these "watching" children practice at home and do explore music experiences with Mom, Dad, and siblings.

Dancing with partners, intricate circle singing games, and "reading" and beating rhythms (Kodaly Music Program) are the goals towards which some children will explore. Some will be listeners, others participants, and all will be accepted for their individual reactions to this socializing musical environment.

ARTICLE # 8: THE REACTIONS OF OLDER CHILDREN

A. Playground Geometry--Environmental Geometry

Along with a Houghton-Miflin unit on geometry, the nine and ten year old children were challenged to look for geometric shapes in their environment. Since these shapes are rarely seen in isolation, it took some searching and focusing for the class to find them. Suddenly, the shapes were everywhere, culminating in the discovery of the kindergarten playground. Viewed from above (from the second floor) the outdoor play area came alive with geometric forms which hitherto had been theoretical. "Look at the bars", they said. "They are parallel lines, and the sand under them is in a long rectangle." "The steps up to the bars are tiny rectangles." "The junglegym is full of trapezoids." "The braces on the swings are triangles." This continued with great gusto. They found almost every shape we had talked about in plane geometry. Some were more observant than others and found isosceles triangles and equilateral ones--but no scalene, they said. The chain-link fence was facinating with its series of small rectangles.

The observation of these geometric shapes in the classroom and playground led to the discussion of why certain shapes were used for that particular piece of furniture and equipment. They used such words as support, pressure, stability and balance. We discussed the shapes of rooms and most furniture--why a rectangular one is most common.

The class wondered if the children in the kindergarten below them, whose playground it was, knew about the exciting shapes there. They planned how they could make booklets for them in the shape of the most basic forms (i.e., triangle, square, circle), help them individually to find these shapes in their playground, and then draw the objects in the correct sections of their books.

B. Perspective--Interpreting Clues in Our Environment

"No one can understand the painted horse or bull unless he knows what such creatures are like"--Philostratus.

This statement becomes clear when one realizes that a picture of an unknown object will tell us nothing of its size unless some familiar objects allow us to estimate its scale. In the process of making a huge wall mural--a background to their construction of a one-room pioneer cabin--the children ran into problems of how things look in perspective. The man working in the field looked at first as if he were a small child beside the figure of the mother who was standing near the cabin. They discovered that as soon as the hills were painted in, the distance was recognized. The hills, which everyone knew were large, were painted very small so that both they and the man were understood to be far off.

Even in drawing the playground, the class discovered that it was difficult drawing from a position above the object. They noticed the changes in perspective when they went down to the ground level.

We decided to set up a group of objects to see if we could predict what all the many views of the grouping would be. Each child sketched the grouping (a brick, a bottle, a matchbox, a spool of wire and a jar) from six positions carefully marked with tape on the floor. We compared and discussed the drawings. We then played a perspective game with a series of photographs of object grouping. There were nine positions to distinguish. In a group of nine each child had to guess from what position his picture was taken.

This activity was enjoyed tremendously and their perspective skill increased with such rapidity that I'm convinced that our power of observation can be improved with very little training. This was verified later when I introduced a commercial game to the class (Parker Brothers, SCAN). It requires matching pattern, shape, color configuration and sequence. At first it was discouragingly impossible for some and difficult for the others. Within a week's period, several children were matching in seconds and the game was being chosen by nearly all.

An incidental learning was my own perceptual/observational growth. I am aware increasingly of the geometrical pattern forms in my environment and after being beaten regularly in SCAN, I can finally match with the best!

C. Use of Geometry in Construction of a Pioneer Cabin

How do we erect the framework of a cabin? Even with many helpers to hold the uprights while they are nailed, they soon fall down or go lop-sided. In order to form straight sides, the angles must be right angles. The children experimented with three types of bracing, all of which were functional, but two were too thick to hammer a nail through. The class had planned how many six foot uprights they needed. They hammered and braced and erected the total framework in one long morning, girls and boys hammering and talking equally loud. In figuring out the required siding they worked out the rule for finding the perimeter. The area formula was never discovered, but by using a square foot piece of oak log as a unit of measurement, they were able to find the amount of square feet in the cabin.

The roof was the challenge and was left to a group of six boys who had finished making pioneer rifles and needed a new job. (The girls were busy making "poke" bonnets.) They had volunteered and were then "committed" to finish. As the task of building a framework to hold the "shingles" became more difficult, the boys would wander off to other activities. They had to be drawn together time after time and helped to think through some specific challenge. How to hold the top ridgepole to the triangular sides really stopped them. Through trial and error tactics, they discovered, again, that braces were necessary. With that discovery, they moved very quickly and with such tremendous enthusiasm and pride. I was glad that they had not been allowed to quit.

The paper shingles were measured carefully with each row planned so as to fit onto the rectangle of paper draped over the roof frame. Such a tedious job it was, but the previous excitement and eagerness to see the roof finished helped these same boys. When the custodian threw the shingles out accidentally, they really despaired at the thought of losing all that careful measuring. The rest of the class felt very sorry and were equally shocked at losing the shingles. Everyone decided to make shingles all at once and to estimate the required length. This task was completed in one session and the roof (and cabin) became a reality.

D. Problem Solving--An Example of a Total Group Discussion

At the time of this lesson, we had been led to believe that this valley had very few trees. Our source was an early pioneer herself. "No trees at all" she had said. The children were puzzled by the apparent great effort it then had taken to obtain logs with which to build their homes. (A later source claimed there were plenty of cottonwoods.)

After visiting an historical site cabin with all its old furnishings, the class came back and wanted to build a real one right in our room. Since we have two very large rooms, this was quite feasible. I asked what they would need to know. What information would be necessary before they could begin. They began asking questions about specific aspects of the building of a log cabin. "Where did they have to go to get the logs." "What tools were available for use?" "How were the cracks filled in between the logs?" "What floor did they have?" These questions had been answered, in part, by the field trip. A few technical problems arose, such as how the heavy logs were raised as the walls grew higher.

I wrote each question on the board and later transfered them onto a chart for reference. Then I prepared information sheets or research papers on the subject, trying to have answers to each question in them. The following day we discussed our ideas about how this building problem was worked out. The children were encouraged to speak out if they disagreed with the idea and why. I tried to remain neutral to each idea. When all the suggestions were written on the board, I told them we were going to test their ideas, to see how well they thought. I had praised and encouraged them continuously. Each child went off to do his research. I did have a few books in which I had some pieces of information. These I passed out to anyone who wanted them and also invited any child to come and sit by me on the rug if he wanted any help with words.

After the research period of ten minutes or so, we shared our information. They talked first, and then I added information which was too difficult or too long to have been put in the research paper. I showed pictures to illustrate the information. Then we were ready to evaluate our ideas on the board. We added to them and erased the ones which hadn't been true, specifically, to the situation. Quite often these were the most creative and I praised them highly. The questions were crossed off on the chart and we then listed what we needed to do to get started building our own cabin and deciding how realistically we could build it.

Out of this lesson came a very good discussion on the growth of technology, and it also helped to develop the concept of "early" pioneers and "later" pioneers. Several children were critical of the pioneers who used logs for houses if they had to go up to the hills for lumber. They couldn't understand why they didn't build rock or sod or mud houses--the latter being their choice for comfort (heat and cold) and for protection from possible fires set by Indians during raids. They came to the conclusion that they *knew* *how* to build *good* *log* *cabins*. Pioneers had always built log cabins. Fathers had taught sons for many years *how* to build them well. They looked at our land in America on a map and soon realized that trees were very abundant in the East and, in fact, needed to be cut down in some places for farming areas.

They felt that this technology blindly followed was foolish and that they should have been more creative and willing to change to suit the environment. This in turn, of course, led to the discussion: How easy was it to build a rock house? And, Is the mud the kind the missions in California had?

We referred from that lesson on to early Eastern pioneers, pioneers who settled in mid-country, pioneers who came to Oregon Territory, and even modern and future pioneers with space and undersea exploration. Ellensburg pioneers had an advanced technology to draw from. They could order glass windows from the Dalles, Oregon and even iron hinges and good farm tools were available in town--sharp contrasts to coverings of waxed paper for windows and bearskins for doors.

ARTICLE # 9: YOUNG SCIENTISTS DEMONSTRATE THEIR EXPERTISE

Subject Area: Science
Students Involved: 8-9 year olds
Project: Use the school model to research an interest area and demonstrate learning by:

1) Choosing an area of interest
2) Researching at least one aspect of it
3) Developing a short 5-10 minute demonstration to present to classmates and, if desired, to the rest of the school.
4) Preparing at least one visual aid to be used in demonstration.

Background Information: Students had had some previous experiences in scientific inquiry and research techniques. A list of possible research topics was presented to the class. Other suggestions were also considered. Students were given a three day time period to explore possible projects and select their own area of interest. They could work as individuals or with a partner or partners. Upon completion of the individual projects, the students set up their own exhibit outside the school lunchroom. Their schoolmates were invited to come in groups of ten at fifteen minute intervals (10:00 a.m. until 1:00 p.m.) to look, listen, and marvel at the young experts. Not one team of experts elected to limit their demonstration to their classmates only.

Example Project: Two girls interested in estimation set up a display table which invited the participation of all interested schoolmates. Seven cranberry juice jars were filled with: uncooked macaroni; split peas; lima beans; assorted sizes of cuisenaire rods (a deliberate attempt to stump the would-be experts); gum balls; peanuts in the shell; and rectangular shaped wrapped candies. A twelve foot wall chart was made to record the individual estimations, entry blanks were prepared, and a large empty oatmeal box was readied to store the estimations as they were received.

To guard against any possible "information leakage" the girls decided to count the items after the contest and record the estimations only after all estimations had been entered.

Working as a team, they prepared a short talk on the difference between guessing and estimating, the value of being able to estimate, and some helpful "scientific" suggestions for greater success.

The piece de resistance was, of course, the prizes. First prize--a candy bar; second prize--two peanuts; and third prize--a smile. Prizes were awarded for each jar and a follow-up chart was prepared which included the range of estimates, the most common estimation, the furthest from correct and the closest estimate.

It was a rewarding experience, for this opportunity to demonstrate their learning to a larger group of people not only honed their performance but heightened their gratification in an assignment well-done.

ARTICLE # 10: THE THREE AND FOUR YEAR OLD AND THE WASHINGTON CENTER FOR EARLY CHILDHOOD EDUCATION LEARNING MODEL

In looking over the tentative learning model, one may see only Stage I, free play and exploration, as skills appropriate to the three and four year old child. But in working with these children in an open pre-school setting, more advanced relationships between their learnings and the model have been found.

Not only does the three and four year old fit into the free play and exploration stage, but also into Stage II, exploring many activities and representing one of them in some way.

Free play and exploration is the beginning learning procedure of every child. The threes and fours can be seen at any time of day examining and discovering their environment in search of ways to react and things to react to that are pleasant and acceptable.

When the three and four year old is seen moving from one activity to another, examining and discovering aspects of it, he has moved into readiness for a second model stage of learning, that is, Exploring Many Activities. In the pre-school setting this is seen in the child who throughout the day participates in several activities, with some degree of involvement, rather than only one activity.

When a child carries through with a project or activity and makes some representation of it, he has moved completely into the second level of model learning, that of Execution of Project and Symbolic Shifting. This is seen in threes and fours in the pre-school setting when a child completes several activities and makes some recall representation of one of them, such as a picture, construction or verbal description.

This is a brief description of generally where three and four year old children fit into the model of learning devised for use at the Washington Center for Early Childhood Education. Do keep in mind though, that the levels of learning of three and four year olds are as individual as physical appearances. Therefore, individual are the ways children will fit into this model of learning.

ARTICLE # 11: EXPLORATION IN RIGID-RULE AREAS

In the six and seven year old room, we're finding a logical combination of two rigid-ruled disciplines, math and science. Using the E.S.S. unit, "Match and Measure" and Nuffield's "Shape and Size", an interest center was developed around a water table. In following the model, the children began by exploring their new environment and finding out what they could about the various objects at the table--objects ranging from measuring spoons, square and round containers, and bottles and tubes of various sizes; to measuring cups marked in ounces, cups, and fractions thereof. Children were asked to predict which of two containers would hold more, and then to ascertain which in effect did by filling them with water. Problems were made more complex by adding containers to those that were to be ordered. Many children were soon comparing and contrasting several objects and expressing excitedly results to problems they had posed for themselves.

At this point, specific terminology was introduced. The markings on the side of the measuring cups were discussed and it was soon discovered that all containers at the table were not really "cups". "Ounces" was a term familiar to many of the children verbally, but its concept was quite vague. The term "estimate" was also introduced with a discussion noting the difference between estimating and guessing. A booklet was then added to the center containing various problems the children could solve. The problem would be read by a child, and then each would write his name and estimate of the answer in the booklet. Their planning and execution of the problems were often novel and would lead to questions unposed initially. Upon solving the problem, simple addition and subtraction would be employed in determining how close an estimate was and whether it was more or less than the actual answer. More containers were added to the center, such as milk cartons from lunch, in order to find out such things as, "How many ounces of milk did I drink today?", and "How many cups of milk are there in a half gallon?"

The importance of filling containers to specific levels in order to get an accurate measurement was noticed in one attempt to rectify a discrepancy found when two children filled a container to see how many cups it held (they came up with two entirely different answers.) Other aspects of measurement were noted by the children as their work continued. In discussing results among themselves, similarities were found to exist between ounces and cups and tablespoons and ounces. The intrigue of why something worked out the way it did led to additional questions posed by the children which were added to the booklet.

A more practical side of measurement was provided by having the children follow a recipe to make kool-aid. Certain mathematical concepts were also found to be necessary in multiplying the recipe to accommodate the amount needed for the class.

In developing this center, certain ground rules were necessary. The children were responsible for wiping up any accidental spills, and in the case of intentional "spills", the child had to leave the center. The children thoroughly enjoyed working with the water, and seldom needed more than one reminder to learn what was acceptable behavior. Small groups of children, no more than four, were permitted at the center at one time. As one child left, another was free to take his place. Although it was not necessary to be with the children for the duration of their time at the center, supervision was needed and some dialogue important in guiding their work and introducing new terms.

The experiences afforded in measuring and the interest generated, led to the conclusion that the center was quite worthwhile. Children's natural enticement in working with water seems to be a logical starting place for the study of volume, mathematics, and their inter-relationship. And judging from the enthusiasm of the children, our study may continue until June.

ARTICLE # 12: WCECE MODEL--A BRITISH INFANT SCHOOL? NOT EXACTLY . .

At times, revolutions are misleading. Consider the spreading educational innovation which has come to be known as the British Infant School. The latter is a concept which stands for a collection of educational approaches, all using the open classroom as a learning environment. Note that it is a *collection* of approaches, not just one theoretical or practical idea.

Despite this problem, there are some obvious differences between the Washington Center for ECE--Learning Model and the collective British Infant School models.

First: The British Infant Schools (BIS's) set up environments designed to encourage children to explore. The WCECE Model encourages teachers to set up activities from which children can learn to explore safely and profitably. The latter places emphasis upon learning about choices.

Second: The BIS's do not actively promote planning. The WCECE Model requires that children learn how to plan and replan. The latter places emphasis upon decision-making.

Third: The BIS's do not *require* that children take down data in some way, although data collection and notebooks seem to be a natural outgrowth of their programs. The WCECE Model requires that, as early as Stage II or just as soon as the child has learned to explore, each will hold project data in some way. This is often done through graphing, drawing pictures, or written narrative; but in the Model it is referred to as that symbolic shifting or representation which takes place at the level of execution. This assumes that most American children do not move as naturally towards data and free-form notebooks as do English children.

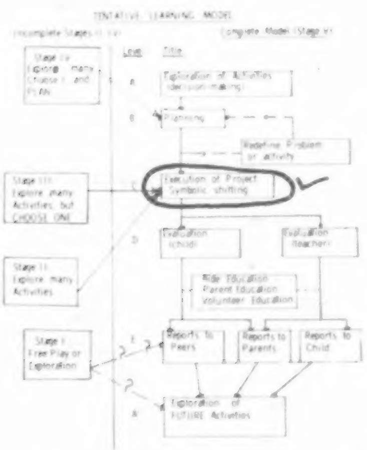
Fourth: The BIS's do not require that children evaluate their work and conclusions. The WCECE Model recognizes that children must be taught to separate their egocentric feelings from the results of their activities. This *analytic skill* is encouraged early by simply getting children to "tell me about it" or "tell me about this--why did you color it red?" The child's rudimentary evaluation builds towards analysis.

Fifth: The BIS's do not require that children report to each other, although they often do. The WCECE Model requires that children report to both peers and parents--to peers because that's the group they'll be reporting to all their lives, and to parents so as to involve the family in the child's education.

The WCECE Model concentrates upon children who are involved in divergent problem-solving. That is, as a problem arises out of activities, children (and adults) tend to produce *several* solutions to that problem--not just one solution. That leads to the understanding that problem-solving skills are not as simple as has often been thought. What is a *good* solution? What is *the best* solution? What is a *usable* solution? What is a *temporary* solution? There are many *kinds* of solutions.

Exploration. Planning. Execution. Evaluation. Reporting. All are a part of the WCECE Model. All focus our attention upon children who are learning very complex, judgmental skills. That is the basic reason for structuring a model which is more specific, more complex, and more demanding than any British Infant School approach.

ARTICLE # 13: CHILDHOOD LEARNING: INTEREST CENTERS AND EXECUTION


TENTATIVE LEARNING MODEL
Incomplete Stages (I-IV)
Complete Model (Stage V)
Level
Title
Stage IV Explore many Choose 1 and PLAN
A
Exploration of Activities (decision-making)
B
Planning
Redefine Problem or activity
Stage III Explore many Activities, but CHOOSE ONE
C
Execution of Project Symbolic shifting
D
Evaluation (child)
Evaluation (teacher)
Stage II Explore many Activities
Aide Education Parent Education Volunteer Education
Stage I Free Play or Exploration
E
?
?
Reports to Peers
Reports to Parents
Reports to Child
?
A'
Exploration of FUTURE Activities

If children are going to explore, to set up and solve problems, they must be given some opportunity to move around in the classroom. This is why the WCECE Model may often look like the British Infant School. After all, both tend to operate optimally in situations involving interest centers.

There is one potential point of conflict, however. Interest centers invite the child to explore, while the Model concentrates upon execution.

Execution is perhaps not a good central theme for the Model. It is really not very descriptive. Two explanatory terms contained within execution are representation and symbolic shifting.

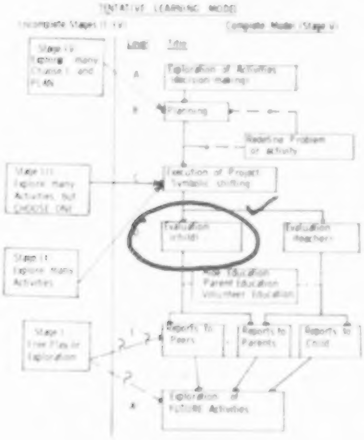
Representation stands for data holding. It sets for the child the goal of holding information in some permanent way. This might be through graphing, drawing pictures, dictating a story, or taping an interview. All of these hold information in such a way that mere memory is not relied upon at a later date.

Symbolic shifting stands for the conceptual rationale underlying data holding. Children learn from their experiences only to the extent that the experiences are repetitive. Holding data gives the child a chance to re-experience; to view his experiences from a different point of view at a different point in time. This is similar to Piaget's assimilation-accommodation argument, and to Cattel's hypothesis concerning crystallized-fluid factors in intelligence.

Interest centers are not antithetical to execution, however. Interest centers do tend to draw students into exploration, but for the purpose of locating and setting up their own problems. Execution (in the Model) only demands that children progress beyond exploration; that children stop the exploratory process at one point in time so as to look for problem situations.

The WCECE Model, then, would recommend the use of interest centers, but in a different way from that observed in British Infant Schools. The former would tend to be more restrictive, to use centers primarily to set up problems. Following the definition of a problem, the student would then be drawn more deliberately into planning, execution, evaluation, and reporting (or into as many of these skills and at such a level as the student's abilities would dictate).

ARTICLE # 14: CHILDHOOD LEARNING: EVALUATION


TENTATIVE LEARNING MODEL
Incomplete Stages (I-IV)
Complete Model (Stage V)
Stage IV Exploring many Choices and PLAN
A
Exploration of Activities (decision making)
B
Planning
Redefine Problem or Activity
Stage III Explore many Activities but CHOOSE ONE
Execution of Project
Evaluation (child)
Evaluation (teacher)
Stage II Explore many Activities
Peer Education Parent Education Volunteer Education
Stage I Free Play or Exploration
?
Reports to Peers
Reports to Parents
Reports to Child
?
Exploration of FUTURE Activities

Why evaluate? Why be so concerned about evaluation? Don't children and adults tend to evaluate that which they do without having to be trained in evaluation?

The answers to these questions are complex, but two crucial factors need to be examined as underlying assumptions: egocentricity and human factors will operate.

First of all, young children are very poor at evaluation because they are egocentric. That is, every proposed solution revolves around them, and encompasses their total commitment. They do not evaluate well because they cannot separate themselves from the problem and its solution (this is true even for many 40-year-old children.)

Secondly, solutions to problems are difficult to evaluate because they often involve human beings. It is recognized that the answer to a math problem can be very sterile, very non-human ("It would take a car one hour to get to the airport. The plane is due at 8:00 p.m. Therefore, we must leave home at 7:00 p.m.") That is not a realistic solution, however, because even that problem should involve people ("Aunt Helen, who is nervous, is coming by plane, and will arrive at 8:00 p.m. If it takes one hour to get to the airport, we should leave at 6:30 p.m., just in case her plane is early. If Uncle Joe, our tipsy relative, is going to drive, we'd better ask him to be here by 6:00 p.m.")

These two assumptions may be tied together, then, to provide one thought-provoking assumption: Good, useful evaluation requires that a problem-solver be trained to take himself out of the solution, and then to inject others (other persons) into the solution. That is the reality of solutions; the reality of life.

APPENDIX A

AN ADDENDUM TO OR EXPANSION OF CHAPTER VIII:

(THE WCECE LEARNING MODEL, TEACHING, AND CURRICULUM)

APPENDIX

THE WCECE LEARNING MODEL, TEACHING AND CURRICULUM

INTRODUCTION

In Chapter VII the WCECE Learning Model was described in detail. The complete model was labeled Stage V, indicating an effective, adult-like approach to problem solving. Stages I-IV were given only as possible approaches to viewing the problem-solving which is less-complete; that is they are ways of looking at the child's progression from simple exploration (Stage I), through greater complexity, (Stages II, III, IV) and towards adult-like problem-solving (Stage V).

In this appendix the model will be examined, stage by stage, in terms of teaching styles and curricular examples. The intent will be to show, in particular, that the model is appropriate for a wide variety of teaching styles. The same is true of curriculum versus the model. This is an extension of the ideas presented in Chapter VIII.

STAGE V: ADULT-LEVEL PROBLEM SOLVING

TEACHING COMPARISON

TEACHER DIRECTED	LEVEL	CHILD DIRECTED
Large group discussion led by teacher; committee grouping; textbooks used as guides.	A--Explore	Activity centers explored; much movement, 2- and 3-person discussion; DECISION made as to activity or project to be pursued.
Teacher plans initial stages of the activity; use of laboratory manuals, a list of questions or other options such as enrichment questions may be given.	B--Plan	One or several children meet as a committee; plan places to go, who to talk to, what to take; plan a way to record and hold information.
	(Replan)	May reduce or restate problem if planning shows this to be needed.

TEACHER DIRECTED	LEVEL	CHILD DIRECTED
Children read, write out answers of findings; may work at desk or with materials in a lab; data is usually held through writing down responses, although student variations are usually accepted.	C--Execute	Children carry through on plans by taping interviews, taking pictures, reading from various sources and taking notes, sketching, tracing, writing (data must be held).
Teacher and children together often check answers; differences in answers are noted and discussed usually in group situations; hand in paper for grading or evaluation.	D--Evaluate	Child evaluates his own work; tries to determine if he answered the question to his satisfaction; states what he would do next time. Teacher tends to evaluate his approach to problem-solving, not the rightness of his answers.
Children may prepare a report for the class; tends to be written paper or group discussion; centering around the answers to original set of questions. Teacher may use this as part of a grade, to be reported to parents.	E--Report	Children prepare solo or group reports for the class or for parents; report may also be given to just a small portion of the class, and the form and format is determined by the student. Teacher may discuss report with student, but report to parents his approach.
Future activities determined by teacher and children in large group discussion; if text is being used, the next activity is centered toward it. Group may choose to alter the activity, in certain circumstances.	A'--Future Activity	Results of this project may influence child's exploration, or he may go to a very different project/problem.

STAGE V CURRICULAR EXAMPLE: Tom has been involved in the study of people who have lived in the area surrounding his home. He has explored many alternatives and decided to develop a project which is concerned with the activities of the pioneers as they settled his valley. After much thought and discussion with other children, he has decided to address himself to the following question: What environmental characteristics were the early settlers looking for as they tried to decide whether or not an area would support them from an economic point of view?

During the planning stage he has encountered difficulty in that the scope of the problem seems to be too large for him to handle; therefore, he has decided to redefine the problem in terms of looking at only the water supply as it related to the economics of land settlement in his valley.

During the execution stage of the project, he talked to the County Engineer and arrived at an estimate of the water flow as it related to the water supply of the area in question. He took a trip to a high point on the ridge surrounding his valley and drew a map of the manner in which the water supply was made available to the valley. Finally, he calculated the approximate water supply per person in his valley, and did the same thing for an adjoining valley in which there was a much lesser density of population. He then made a comparative graph of the two valleys and their water supply situation per unit of population.

Finally, an evaluation was made by both Tom and his teacher concerning the progress of the project in terms of degree to which the project tended to answer the initial problem or question. The teacher's evaluation dealt with the obvious readiness of the student for exploratory learning, plus the child's ability to deal with a rigid mathematical system in terms of quantification and graphic representation.

STAGE IV: NEARLY COMPLETE PROBLEM SOLVING

TEACHING COMPARISON

TEACHER DIRECTED	LEVEL	CHILD DIRECTED
Lecturing, large group discussion; reading together; textbook used; teacher may subgroup and plan according to SKILL LEVELS.	A--Explore	Activity centers explored; much movement; 2- and 3-person discussion; DECISION made as to activity or project to be pursued.
Teacher plans the activity; will often use worksheets, manuals, list of questions; may have 2-3 sets available at different SKILL LEVELS.	B--Plan	One or several children meet as a committee; plan places to go, who to talk to, what to take; plan a way to record and hold information.
	(Replan)	May CHANGE HIS MIND; choose a DIFFERENT activity/problem.

TEACHER DIRECTED	LEVEL	CHILD DIRECTED
Children read, write out answers to questions; work out problems; may work at desk or with materials in a lab; data is usually held through writing down responses.	C--Execute	Children carry through plan (or new plan) by taping interviews, taking pictures, reading and note-taking, sketching, tracing, painting (data MUST be held in some way).
Teacher and children together often check answers; discuss the more frequent wrong answers; hand in paper for grading UNLESS further reports are to be prepared.	D--Evaluate	Child evaluates his own work; tries to determine if he answered the question to his satisfaction; states what he would do next time. Teacher tends to evaluate his approach to problem-solving, not the rightness of his answers.
Children may prepare a solo or group report for the class; tends to be a written paper or group discussion (panel), centering around the answers to the original set of questions (may need several panels, based on SKILL LEVEL assignments). Teacher uses this as part of grade, reports to parents.	E--Report	Children prepare solo or group reports for the class or for parents; report may also be given to just a small portion of the class, and the form and format is determined by the student. Teacher may discuss report with student, but reports to parents his basic approach.
Future activities determined by teacher; if a text is being used, the next activity is automatic; group may choose or be directed by SKILL LEVELS.	A'--Future Activity	Results of this project may influence child's exploration, or he may go to a very different project/problem.

The distinguishing feature of Stage IV learning is that the child does not have to make an irreversible decision about his activity. The child may be allowed to choose a new set of problems and activities, if desired.

STAGE IV CURRICULAR EXAMPLE: Sally started with the same group of children as Tom, exploring the nature of the early settlement of the area in which she lived. She encountered difficulty, however, in arriving at a proposed problem or solution based upon either current or stored data. Therefore, she shifted her attack on the study of the environment such that she totally rejected the study of population settlement and its attendent problems. Instead, she chose to focus upon the degree to which the present population of her valley was tending to pollute the environment of the valley at the present time. From this point on, her attack upon the problem was much the same as would be true of the Stage V student's attack. The difference lies in the fact that she was allowed to shift her decision to which environmental problem she actually would be working with.

STAGE IV EXAMPLE: A group of five children decided to build an airport using blocks. One child changes his mind and decides to make a farm. He plans his layout and builds it with blocks. He then draws a picture of it, which is an example of symbolic shifting. He then completes the last three steps of the model.

STAGE III: PROBLEM-SOLVING WITH HELP IN PLANNING

TEACHING COMPARISON

TEACHER DIRECTED	LEVEL	CHILD DIRECTED
Teacher works through several sets of activities with children, some of which is entertainment, games. Then centers attention on JUST ONE ACTIVITY.	A--Explore	Activity centers explored; much movement from one center to another; then children PICK ONE CENTER to stay in for a certain length of time.
Teacher plans the activities.	B--Plan (minimal)	Teacher just sets up several interest centers.
Children may do a worksheet centering around the one activity.	C--Execute	Children in some permanent way represent what they did in the center they chose (draw a picture, dictate a story, trace around some blocks).
Teacher and child discuss the worksheet, often send it home.	D--Evaluate	Child discusses what he has produced; teacher notes his willingness and ability to evaluate his own work.
Reports to the class are usually brief, and often of the SHARING TIME variety in the morning.	E--Report	Children show their work to others in the class, so that this sharing comes at the END of the day.

TEACHER DIRECTED	LEVEL	CHILD DIRECTED
Future activities determined by the teacher; are often oriented towards those SKILLS which the worksheets have shown to be most lacking.	A'--Future Activities	The children's choices influence the teacher who nonetheless, usually has many centers representing a range of skills and interests.

In Stage III the child is asked to explore and then, PRIOR TO symbolic shifting, is to choose one activity. This one activity is the one to be represented in symbolic shifting. Planning is circumvented, and the child's evaluations (of himself) and reports are minimized. There is little decision-making, and the child does minimal planning. Instead he progresses from exploration almost directly into the activity which he must stay with for a specified period of time.

STAGE III CURRICULAR EXAMPLE # 1: Jim was also interested in the exploration of his environment. Following exploration discussion, he chose a problem concerning pioneer settlement, and then immediately progressed into the execution of the project.

In this stage it is obvious that there was little decision-making taking place, other than that Jim has had to chose one activity. The student may eventually shift the activity or exploration, however, and will often be forced to do so because he is leaving out the important step of planning.

STAGE III EXAMPLE # 2: This stage of learning can be especially pictured as representative of the play or work situation in an activity-based program. The child is allowed to explore freely through many activities, but is eventually asked to choose only one of them with which he will spend a period of time. Following the execution or exploration of those activities, the child will again be asked to quantify in some way the activity in which he has been involved. For example, if the activity has been some role playing in which the child dressed up as a pioneer, the child may be asked to draw a picture of that activity. Creative drama or dictation could also be used as a representational device at the execution stage.

STAGE II: SIMPLE PROBLEM-SOLVING

TEACHING COMPARISON

TEACHER DIRECTED	LEVEL	CHILD DIRECTED
Teacher works through several sets of activities with children. No single activity is emphasized.	A--Explore	Activity centers explored; much movement from one center to another; children may have a coding system to determine where they belong, or guidelines could have been set in the family meeting.

TEACHER DIRECTED	LEVEL	CHILD DIRECTED
Teacher plans the activities.	B--Plan (minimal)	Teacher sets up several interest centers.
Children may do a worksheet, or may be in several play or listen settings.	C--Execute	Children in some permanent way represent what they did in one of the centers. The choice of which center to represent (by painting, drawing, etc.) IS THE CHILD'S.
Teacher and child discuss the worksheet, often send it home.	D--Evaluate	Child discusses what he has produced. Teacher notes his willingness and ability to evaluate his own work.
Any reports to the class are brief, and often of the SHARING variety in the morning. Mothers have periodic conferences.	E--Report	Children show their work to the others in the class, so that SHARING comes at the END of the day. Parents gain feedback by working with the children in the classroom.
Future activities determined by the teacher; are often oriented towards those skills which the teacher feels to be most lacking.	A'--Future Activities	The children's choices influence the teacher who, nonetheless, usually has many centers representing a wide range of skills and interests. The teacher may close and open centers as necessary to direct the children's exploration.

In Stage II the child is asked to explore many activities and then choose one of them to represent in some permanent way. The child's evaluations (of himself) and reports are minimized. The distinguishing features of Stage II learning are that the child is allowed to pass the decision-making step of exploration and the forethought involved in planning and redefinition of problems. In addition, the child is not expected to choose just one activity in representation. It is this latter point which distinguishes Stage II from Stage III learning: the child's picture may represent several activities.

STAGE II CURRICULAR EXAMPLE: An even earlier stage of exploration can be pictured as being nearly equivalent to Stage III. In Stage II learning, however, the child is allowed to freely explore activities and problem situations without making choices. If a child has been asked to be in exploratory situations for a period of two hours, he would then be asked to draw a picture representing any one of those activities. The choice of activities to be represented would belong to the child.

At this point, the reader may note that Stages II-V have always involved some kind of graphing, picture-drawing, or other symbolic representation. The symbolic shifting is a necessary part of the WCECE model.

STAGE I: THE CHILD'S INTRODUCTION TO PROBLEM-SOLVING

TEACHING COMPARISON

TEACHER DIRECTED	LEVEL	CHILD DIRECTED
Teacher works through several sets of activities with children; no single activity is emphasized.	A--Explore	Activity centers are established and children allowed to explore; emphasis is placed upon teaching the children PROFITABLE AND SAFE ways to explore their environment.
Teacher directed.	B--Plan (minimal)	Teacher directed.
Wide variations here but lots of teacher-helping is used.	C--Execute (not required)	No permanent representation is required. Teacher monitors.
Minimal: evaluation often oriented towards statements relevant to the ages-and stages developmental levels approach.	D--Evaluate (minimal)	Minimal; often just looking at the child's ability to operate socially and independently.
Parents are given much of the developmental information.	E--Report (minimal)	Some reporting goes on between peers as they play; mothers often receive their information by working with the children in the classroom.
The next day's activities are planned by the teacher.	A'--Future Activities	Gradually the children's discussions are directed towards: 1. What did I do today? 2. What will I want to do tomorrow?

In Stage I the child is involved at the most basic level of education. His tasks are to learn how to explore, and then to develop the ability to let the activities he's done today influence what he asks to do tomorrow. At the earliest level of inquiry, the child can be pictured as engaged in free play. That is, to the adult, there often seems to be a lack of both rules and decision-making behavior. This can be erroneous, however, since the child is being governed by those rules which he applies through role playing.

By its very nature, Stage I learning, or free play, does not necessarily lead towards any other level of representation or decision-making. It is enough that the child be considered involved in an exploration of the environment, governed only by those rules and roles which the child sees daily as setting boundaries upon his environment.

STAGE I CURRICULAR EXAMPLE: The child must be trained in those ways in which the environment may safely and profitably be explored. For example, the child must be taught that tasting everything in the environment is a poor exploratory device, because it is potentially far too dangerous. Touching everything may also be too dangerous, as is looking at extremely bright lights or listening to extremely loud noises.

There are also social considerations which must be taught to the child. Many young boys will see it as entirely appropriate if they dress up and play the role of a mother. While this is considered appropriate within an educational context, the child should be made aware that he would have to prepare himself for immediate social reaction were he to wear that garb into a downtown restaurant or department store.